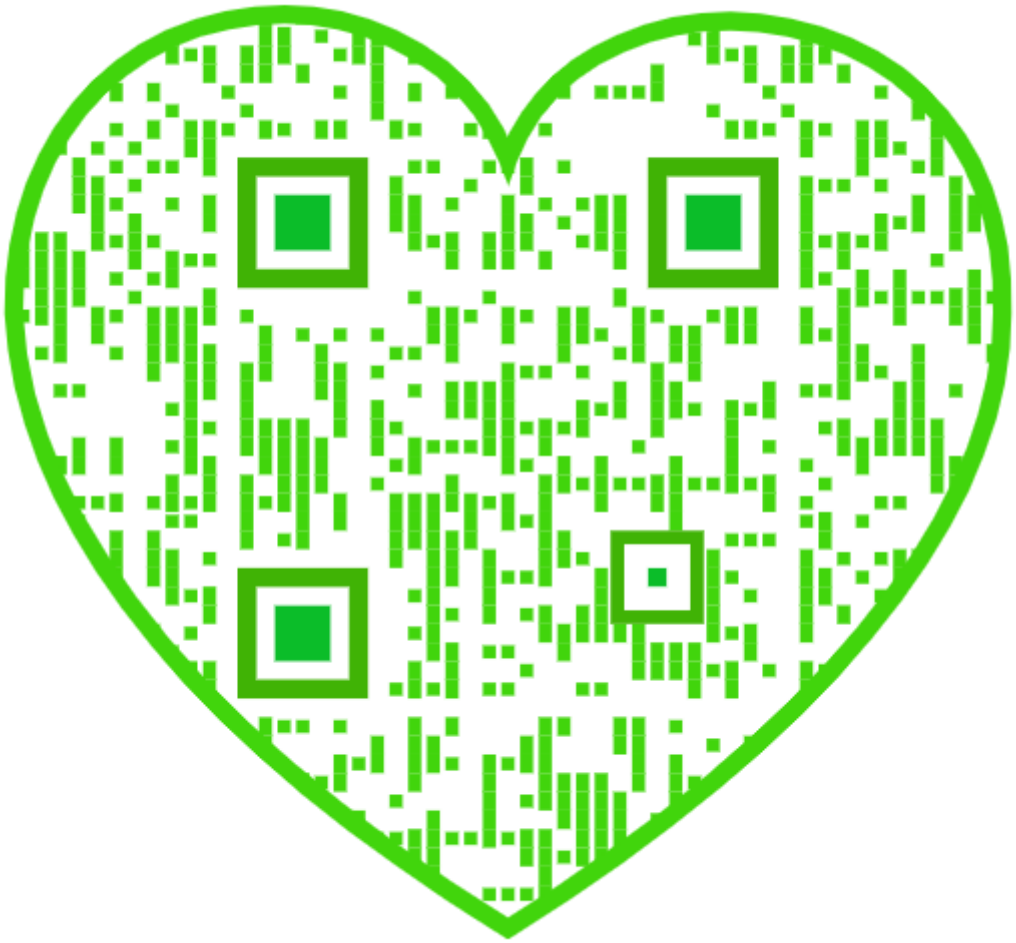

Modern Business

A SERIES OF EIGHTEEN TEXTS, ESPECIALLY PREPARED FOR THE ALEXANDER HAMILTON INSTITUTE COURSE IN ACCOUNTS, FINANCE AND MANAGEMENT

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Banking

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Modern Business

Volume IX

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PART I: BANKING PRINCIPLES

CHAPTER I

THE NATURE AND USES OF MONEY

1. *Definition of money.*—Money is any commodity which is universally accepted in a country in exchange for all other commodities and services. The person who receives money takes it without questioning the credit of the payer. He intends to use it only in exchange for other goods, or in the final payment of debt, or in storing it with these purposes in view.

The Spanish don purchased his armor with silver; the Czar of the Russias once had coins struck from platinum; the North American Indian exchanged his pelts for strings of wampum beads made from shells of the sea. Each of these commodities served the purposes of money in its own time and place. But there is only one thing—namely, gold—which the people of the whole civilized world are always willing to accept as a medium of exchange. Since gold is the only medium having universal acceptability, it is the only real money.

Ordinary checks or promissory notes are not money, since they are never received without questioning the credit of the payer. When a goldsmith buys gold intending to fashion it into rings, that gold ceases to be money. Universal acceptability, value independent of the payer's credit, actual or prospective

use as a medium of exchange—these are the essential characteristics of money.

2. *Various uses of the term "money."*—In the newspapers, in "the street," and even in scientific treatises, we find the term "money" used in widely different senses. Definition is essential to clear thinking. Let us, therefore, consider the various meanings which have been given to this word "money."

Money is frequently employed in general literature and in popular speech as the equivalent of riches or wealth. We say that Smith has been "making money" or has more money than he can spend.

The term is commonly employed as a synonym of capital or loanable funds; as "the money market," "time money," "money is tight." In this sense, which is common in financial circles, money means lending power, and, as we have found in the study of economics, is more closely related to the savings of a community than to the amount of money or cash in existence.

In the courts money is anything which the law declares shall be received in discharge of a debt which is payable in money. Legal tender is the correct term to use in this case. The following kinds of legal tender are specified by the laws of the United States:

(1) Gold coins, legal tender without limit.

(2) Silver dollars and Treasury notes of 1890, legal tender unless otherwise stipulated in the contract.

(3) United States notes (greenbacks), legal tender except for interest on the public debt or for duties on imports. By Treasury order, greenbacks have been made receivable for duties since the resumption of specie payment in 1879.

(4) National bank notes, legal tender for all debts to national banks and for all debts to the federal gov-

ernment except duties on imports, and for all debts owed by the government to individuals except interest and principal of United States bonds.

(5) Federal reserve notes, legal tender for all debts to national banks and members of the federal reserve system and for all "taxes, customs, and other public dues."

(6) Subsidiary silver coins, legal tender to the amount of $10 in one payment.

(7) Coins of nickel and copper, legal tender to the amount of 25 cents in one payment.

Gold coin is thus the only legal tender not subject to any limitations.

National banks, members of the federal reserve system, and federal reserve banks are required to keep on hand a certain amount of "lawful money" as a reserve for the protection of depositors. "Lawful money" includes gold coin and bullion, gold certificates, silver dollars, silver certificates, greenbacks, and treasury notes. It must not be confused with legal tender.

In the United States, we are accustomed to think of gold coin, bank notes, greenbacks, silver dollars, etc., as being money. So far as this country is concerned the use is correct. All these media of exchange are acceptable throughout the nation without question as to the credit of the payer. Strictly speaking, all these except gold coin are credit money, but in this book we shall speak of greenbacks, silver dollars, etc., as money. When we wish to speak of gold we shall refer to it by name or as standard money.

Since 1861 England has been on a gold standard. Silver and bronze coins are legal tender to a limited extent. Notes of the Bank of England are legal tender for sums above five pounds.

Germany adopted the gold standard in 1873 after having exacted the billion dollar indemnity from France. Subsidiary coins of silver, nickel and bronze are legal tender in limited amounts. The silver *thaler* is unlimited legal tender as are notes of the Reichsbank.

France is nominally on the bimetallic standard, the ratio being 15½ to 1. Silver, as well as gold, is legal tender, but only five-franc silver pieces are coined. Notes of the Bank of France are legal tender as long as the Bank shall continue to redeem them in specie. Twice the Bank has been permitted to suspend specie payment without losing the legal tender quality of its notes.

Canada coins no gold, but the British sovereign and the eagle of the United States are legal tender. Silver and bronze are legal tender in limited amount. Canadian bank notes are not legal tender. The government issues Dominion notes which are redeemable in gold.[1]

3. *Kinds of money.*—Various classifications of money may be made according to the purposes which we have in mind. Two systems of classification are especially important. We need to examine money first as to its source. Who supplies the medium of exchange? We may say that money is issued by governments and by persons.

Wampum beads could be made by anyone having the material and the requisite skill and patience. The early gold-diggers in our western states were accustomed to stamp pieces of gold, to certify that they were of a certain weight and fineness, and use them as money. In 1849 many establishments were busily assaying and coining gold. The product of one of these, located at

[1] For detailed information concerning currency systems, see Tate's "Modern Cambist" or Muhleman's "Monetary Systems of the World."

Salt Lake City, was known as Mormon coin. Moffat and Company of San Francisco issued coins of the same weight and fineness as those coined at the mint and they remained in circulation even after the San Francisco mint began operations. The total issue of private coins in the West before the Civil War has been estimated at $50,000,000. A Scotchman by the name of George Smith had already been issuing large quantities of paper money in the middle western states. His certificates of deposit attained a wide circulation and were commonly known as "George Smith's money."

We no longer have any really private issues of money. National bank notes and federal reserve notes, while nominally issued by corporations, are so hedged about by government regulations and guaranties as to be hardly comparable to those just mentioned. In certain states trade checks are issued by individuals and corporations, but their radius of circulation is too short to warrant calling them money. The trade check of a Tennessee coal operator will not pass in Chicago any more readily than a piece of Chinese money.

The second important classification is based on the qualities of the money itself. The world has had experience with commodity money, credit money, and fiat money.

4. *Commodity money.*—For many centuries the free use of gold and silver as money was permitted. Under such circumstances their value was the product of two utilities—namely, their use as an ordinary commodity and their use as money. Money made from a material which is freely coined in this way is called commodity money. Gold has been the only commodity money in the United States since we stopped the free coinage of silver in 1873. The value of a gold coin is greater

than the value of its metallic contents by the amount of the coinage expenses. In the same way the value of a gold bracelet is greater than that of the metal which it contains. Let there be a sufficient increase in the demand for bracelets and other gold objects of art, and gold coins will go to the melting pot. On the other hand, let there be a sufficient increase in the demand for gold coin, and gold rings will find their way to the mint in the form of bullion.

It is important that we keep in mind the fact that the value of gold depends upon its use in the arts as well as its monetary use. Free coinage is the distinguishing characteristic of commodity money.

5. *Credit money.*—In 1690 the soldiers of the Colony of Massachusetts returned from an unsuccessful campaign in Canada. From necessity or for some other reason they demanded immediate pay for their services and refused to wait until taxes could be collected. The public treasury being empty there was only one thing to do—issue government paper money, known as bills of credit. These bills were issued against prospective tax collections. They could be used in payment of taxes and were exchangeable for any commodities in the treasury of the colony. This was the first government paper to circulate as money in this country. It was a promise to pay in the future, but at no particular time, and bore no interest.

Any promise-to-pay money which all the people of the country are willing to accept in lieu of money is called credit money. Credit money may be issued by individuals or corporations as well as by the government. In either case the issuer must have the confidence of all the people, as the instrument of credit would not otherwise be generally accepted.

The value of credit money depends on the value of the standard money in which it is redeemable and on the confidence which the people have in its redemption. Its value is independent of the material from which it is made. Credit money must be a form of credit payable on demand. It should not bear interest, as the accrued interest would give it a different value from day to day.

If the people lose faith in the soundness of credit money, they refuse to accept it in lieu of the standard money except at a discount. A government can force its inconvertible credit upon a people by making it legal tender. Such action will be welcomed by debtors as it will enable them to settle their obligations with a less valuable kind of money than they had anticipated paying. Creditors will complain but will accept it of necessity.

Credit money may be made from metal as well as from paper. All the money used in the United States, except gold coin, is credit money. The value of the silver dollar depends upon the value of the standard money which we believe the government is willing and able to exchange for it.

6. *Fiat money.*—The term "fiat money" is used in various ways by different writers. Hardly any two will agree perfectly in the use of the term. Practically all unite in saying that artificial regulation of supply by legislative enactment is one characteristic. Many use the term to designate any money whose supply is regulated in this way. Greenbacks are fiat money in this sense as their supply has been definitely fixed by governmental action.

But greenbacks are also credit money, their value being determined in the same way as that of the silver

dollar. Definition is for convenience. If our classification is to serve any worth-while purpose, we should have it as clear-cut as possible. To that end, we will not use the term "fiat money" to designate any money whose value depends upon confidence or credit.

What, then, is fiat money? To distinguish it from commodity money, we shall say that it is standard money whose value has no relation to the worth of the material composing it. We have just distinguished it from credit money by saying that its value is independent of confidence or credit. Fiat money is money whose supply is artificially regulated by governmental action. This further distinguishes it from commodity money. Its value is derived solely from its utility as a medium of exchange. This distinguishes it from both commodity and credit money.

If a government should take a piece of paper and print on it "This is a dollar" and that paper were accepted by the people as a dollar it would be fiat money.

The people would be forced to accept that money if it were made legal tender, especially if it were made the only legal tender. If a piece of gold were stamped in the same way, without reference to its commodity value, and put into circulation as money, it would be fiat money. To pay our debts due to people of other countries, we should still use fine gold.

The greenbacks, then, are credit money—not fiat money. In theory they have always been credit money, for Congress intended, when issuing them, that they should some day be redeemable in standard money. Practically, they were fiat money for a while. For a number of years they were the standard money in terms of which people thought and traded. No one knew when they would become redeemable or whether they would

ever become so. One man accepted them because he knew he could pass them along to his neighbor. For making foreign payments gold was bought with greenbacks. Bank notes—which, with greenbacks, formed the bulk of the currency—were redeemable not in gold but in greenbacks. The value of greenbacks was derived from their use as a medium of exchange. This is the chief attribute of fiat money.

After a while an agitation was begun in Congress to make the greenback payable in gold at par. People then began to look forward to specie redemption and the element of credit crept into the value of the greenback. From that time on the greenback assumed more and more the nature of credit money and lost more and more the character of fiat money.

We have never had true fiat money in this country, both in theory and in practice. But it is important that we understand its nature. It is especially important that we grasp the truth that money can derive value from its use as a medium of exchange without reference to anything else. If scientifically issued, fiat money would be ideal. Its supply could be regulated so as to prevent the extreme fluctuations in the level of prices which have so often disturbed business relations. The difficulties in the way of fiat money are so great, however, that it is doubtful whether its adoption will ever be advisable or even possible.

7. *Coinage.*—Coinage is the process of identifying a piece of metal intended for use as money. In the United States the work of coinage has been taken over by the government. The same is true in most countries. Coins are of two classes:

(1) Those made by the government for individuals from metal deposited by them. They are not limited in

quantity and are full legal tender. They contain practically the same amount of metal as was deposited with the mint. Gold coin is an example of this class.

(2) Those made by the government on its own account. They are sold to individuals at a profit and are limited in quantity. All of our coins except gold are in this class. Their value is independent of the worth of the commodity from which they are made. The value of coins of the second class may be derived from the fact that they are redeemable in standard money or from their utility as a medium of exchange. People have need for a certain amount of "pocket change" which can best be filled by coins of this class.

The coinage of gold in this country is not only free, i. e., open to all persons, but it is also gratuitous—the expense of mintage being borne by the government. But a person bringing gold to the mint must necessarily pay for the alloy, for the refinement of the metal and for its conversion into bullion, which is the technical name for standard gold ready for coinage. These expenses are known as the "brassage" charge.

In England and the United States brassage is the only expense paid by persons, but in most other countries a further charge known as "seigniorage" (the seignior's or lord's share) is exacted. This seigniorage may be large enough to net a considerable profit to the government.

8. *Gresham's law.*—It was once a common practice for men to clip a small amount of metal from each coin as it passed through their hands. The milled edges on our gold and silver coins make this impossible without detection, but the practice is still common in the Orient. It was also once the custom for rulers to melt down the coins which they had in the treasury and re-

coin them in lighter weight—thus making a profit. These operations would cause some of the coins in circulation to be heavier than others. Suppose our gold coins were of varying weights, people having gold payments to make abroad would send out the heavier coins, as the metal in that case exchanges according to actual weight and fineness. After a while we would have left in circulation only the clipped and debased coins.

This tendency to discriminate between coins of the same nominal value is called Gresham's law, named after an official who once called it to the attention of Queen Elizabeth. We give the law a somewhat broader application today. Whenever people for any reason begin to discriminate between two kinds of money they will invariably pay out the inferior and hold the better, thus removing the latter from circulation. In this country lawful money is so far as possible withheld from circulation by the banks. Its use as a required reserve makes it more valuable to them than bank notes.

9. *Medium of exchange.*—Money serves several purposes, but all are secondary to the one attribute which distinguishes it from all other things—namely, its service as a medium of exchange. All the uses of money spring from this one utility. Money performs a specific service for men, like a hammer or a knife, and is wanted for no other purpose.

Since all forms of wealth can be obtained in exchange for money, however, and are usually obtained in that way, men have formed the habit of regarding money as a mysterious thing—a sort of symbol of values, an omnipotent "third commodity"—the possession of which gives them command over all comforts and luxuries. They cannot easily think of it as a simple tool which they want for a single service. As a carpenter wants

saws, hammers, and nails with which to build a house, so a man wants money to use in making exchanges. Money differs from other tools only in the fact that every man has occasion to use it.[1]

10. *Standard of value.*—Money, by being continually brought into comparison with other commodities through its use as a medium of exchange, naturally becomes a standard of values. If we know that wheat sells at one dollar a bushel and oats at fifty cents, we know that the value of wheat is twice that of oats. We compare the wealth of individuals in the same way, involuntarily making an estimate of the sums of money for which their respective properties would sell.

Men speak of their incomes in terms of money, not in terms of the necessities and comforts which those incomes will provide. This custom leads them into the erroneous assumption that a mere increase in their money income warrants the conclusion that their condition is improving. In 1913, $6,000 would barely suffice to buy the goods which, fifteen years earlier, could have been bought for $4,000. It is a mistake to assume that money is a permanent, changeless standard adapted to the comparison of values over long periods of time. This is not and cannot be true so long as its own value is subject to change. The use of money enables us to compare the values of goods only at a given time.

11. *Standard of deferred payments.*—Promissory notes and other credit instruments are usually promises to pay a certain number of dollars at some specific time in the future. From this custom money becomes a standard of deferred payments. Unless the contract provides otherwise, a debt in this country can be discharged by payment of any money that is legal tender

[1] See J. F. Johnson: "Money and Currency," Chap. II.

at the maturity of the obligation. This fact sets forth no new service performed by money. It merely means that the parties to the contract not only use money as a medium of exchange in the present, but also agree to use it in the future.

No money has ever been used which satisfactorily performed the function of a standard of deferred payments. Gold is, perhaps, the best that has so far been employed, but it is imperfect.

Suppose we had loaned $1,000 in 1897, expecting its return in 1913 with interest at three per cent. Compounding annually, we would have received about $1,600 at maturity. But we have just seen that the purchasing power of gold in 1913 was only two-thirds of that in 1897. Our $1,600 was, then, equivalent in purchasing power to only about 1,067 of the dollars which we originally loaned. In other words, we really would have received only $67 for the use of $1,000 through a period of sixteen years. Evidently little lending would be done if it were known in advance that such would be the outcome. As a matter of fact, few lenders realize the true state of affairs even when the money is returned. They may notice that prices have risen. They think the value of commodities has risen; but fail to see that the value of their money has fallen.

12. *Store of value.*—Since we have constant need for a medium of exchange we are accustomed to keep a part of our wealth in the form of money. From this custom we say that money is used as a store of value. This is no independent function of money; it springs from the need for a medium of exchange. We do not keep money for the sake of keeping it, but because we anticipate a call for its services.

True, the miser once converted his wealth into gold

or silver which he hid under the hearth-stone. If he intended to bring it out later and use it in exchange for goods, it was money. But if he kept it merely because he wished to wash his hands in the stream of lustrous metal, it was no more money than are the motley curios of a coin collector. The miser who gloats over glittering coin belongs to fable and tradition. The twentieth-century miser gloats over stocks and bonds and mortgages and warranty deeds.

During the Middle Ages men often found it advisable to conceal the amount of their property from the taxgatherers or the feudal lord and so converted their surplus wealth into precious metals, which they buried in the ground. Even today, in such countries as India and China, the natives, having little knowledge of investment and being fearful of robbery, have the habit of hoarding much of their wealth in the form of gold and silver.

The large sums of money which banks hold in reserve are commonly cited as an example of the use of money as a store of value. These reserves are kept by the banks because they have large outstanding liabilities which are payable in money. The need for a medium of exchange is their reason for existence.

Writers upon money usually say that money has four functions; it acts as a medium of exchange, a standard of value, a standard of deferred payments, and a store of value. We have just seen how the last three functions are derived from the first—the service as a medium of exchange.

13. *Money never idle.*—Men frequently hold wheat back from the market in the hope of getting a higher price. Not so with money. Even when the value of money is rising, that is to say, when general prices are

falling, a man who has money can do something better than to keep it in a safe. It will not pay him to sell the money for goods, as he will have to sell them at lower prices than he has paid. But he can make a profit by loaning the money or by investing in mortgages or bonds, for later he will get back the principal with interest. So it happens that under normal conditions all the money in a country is busy doing its work as a medium of exchange or as a basis of credit operations. The existence of any large supply not employed in one of these two ways is a sure indication of industrial and financial derangement or of unscientific legislation.

14. *The gold standard.*—By an act of February 12, 1873, gold was declared the standard of value in the United States. On March 14, 1900, Congress passed an act which is commonly called "The Gold Standard Act." It provided in direct terms that greenbacks and Treasury notes of 1890 should be redeemed in gold on demand and that a gold reserve of $150,000,000 should be kept in the Treasury for this purpose. One avowed purpose of the act was "to maintain the parity of all forms of money issued or coined by the United States." Our currency can be kept at par with gold only by redemption in gold on demand. The government has thus practically pledged itself to gold redemption.

15. *Bimetallism.*—Before 1873 the United States mint could coin 23.22 grains of gold or 371.25 grains of silver into a piece of money which would be called a dollar. The mint ratio was 371.25 to 23.22 or, as it was customary to say, about 16 to 1. Both coins were legal tender and were coined freely. This was what is called the double or bimetallic standard. Free coinage

and legal tender of both metals at a fixed mint ratio are the essentials of bimetallism.

On the recommendation of Alexander Hamilton the United States adopted the bimetallic standard in 1792. The ratio was fixed at 15 to 1. The establishing of this ratio was an error in judgment. In the metal markets of the world, silver was exchanging for gold at the ratio of about 15½ to 1. That is to say, an ounce of gold was worth 15½ ounces of silver. Gold bullion was worth more in the market than at the mint under our ratio. Gresham's law began to operate. Our gold was sent abroad for the purchase of silver and the silver thus obtained was presented at the mint for coinage. In a short time we lost all our gold, as it was undervalued at the mint. The country was upon the silver standard, although the basis was nominally bimetallic.

By acts of Congress in 1834 and 1837 the coinage ratio was changed from 15 to 1 to 15.9883 to 1. The ratio was commonly spoken of as 16 to 1. The country, as a result, passed from the silver to the gold standard, for the new ratio undervalued silver as much as the old ratio had undervalued gold. The monetary system established by the legislation of 1834-37 continued in force until 1861, gold being the real standard of prices throughout this period. The country soon possessed an abundance of gold coin. Silver dollars were coined to some extent, but most of them were melted or exported.

The new situation was not without its inconveniences. Under the law of 1792, two half-dollars, four quarters, or ten dimes contained as much silver as a dollar. After 1834 it was profitable to export any subsidiary silver coins that were of full weight. Thus a scarcity of small change arose, only worn and light-weight coins

remaining in circulation. To remedy this state of affairs Congress passed a law in 1853 changing the character of subsidiary coins. Their free coinage was stopped and their legal tender quality limited. Moreover the weight of the coins was reduced about 7½ per cent. This change made the ratio between gold and subsidiary coins 14.88 to 1, whereas the market ratio at the time was about 15.23 to 1. The desired result was accomplished. After 1853 the United States, for the first time in its history, had an abundance of "pocket change" of its own minting. Accordingly, in 1857, Congress repealed all laws giving a legal tender quality to foreign silver coins. Prior to 1853, subsidiary silver coins were commodity or standard money; since that date they have been mere credit or token money.

16. *The "limping standard."*—We have already seen how an act of 1873 made the gold dollar the standard of value in the United States. Silver was no longer commodity money and no silver dollars were to be coined. During the period 1861 to 1873 this country had practically no metallic money except subsidiary silver, the circulation consisting almost entirely of greenbacks and bank notes. Greenbacks, as we have seen, were the standard of value; and while in theory they were credit money, they were in fact fiat money.

Specie redemption was resumed in 1879. This meant the adoption of the gold standard in fact. From 1873 to 1879 there had not been enough gold to make the gold standard effective.

In 1878, however, Congress passed a bill, commonly known as the Bland-Allison Act, which threw some doubt on the nature of our monetary unit. This act provided for the monthly purchase of from $2,000,000 to $4,000,000 worth of silver bullion and its coinage

into dollars of 412½ grains standard nine-tenths fine. In the act these dollars were called "standard silver dollars" and were made legal tender for all debts, public and private, principal and interest of government bonds excepted. The act remained in force until July 14, 1890, the total coinage of silver dollars amounting to $378,166,793. For the first time in the country's history there was an abundance of silver dollars in circulation. Indeed, after a few years it was found impossible to get fresh supplies into circulation, the country's need for this kind of currency being satisfied during the eighties with less than $60,000,000.

The Bland-Allison silver dollar was a monetary anomaly. Although called a "standard silver dollar" to propitiate the friends of silver, it was in no sense standard money; nor was it recognized as credit money, for no provision whatever was made for its redemption in gold. Theoretically and legally it was fiat money, being subject to depreciation if issued in excess; but practically credit money, the people firmly believing that somehow it would be kept at par with gold. Two things were essential to the maintenance of its value: first, limitation of supply; second, confidence of the people in the ability and purpose of the government to prevent its depreciation in terms of gold. The first factor did not become operative, as silver dollars did not circulate in sufficient quantity to do away entirely with the gold standard. The volume of silver dollars did not affect their value directly. Indirectly it did. In so far as the use of silver dollars lessened the demand for gold they lowered the value of the gold dollar. The value of the gold dollar was reflected in the silver dollar.

Theoretically the supply of silver dollars might have been increased until all the country's gold had been

driven out of circulation. If the silver had then remained in circulation, it would have become the standard of value and other forms of money would have been redeemed in it. The country, thereby, would have passed from the gold standard to a fiat standard, the value of silver dollars being affected directly by their volume.

Our monetary system at that time, being neither bimetallic nor explicitly monometallic, was said to be upon a "limping standard." This expression was borrowed from Germany, which at the time was in a similar position.

The silver dollar was made credit money in theory as well as in practice by the Sherman Act of 1890 which remained in force for three years. This act provided for the monthly purchase of 4,500,000 ounces of silver at the market price so long as the price of silver did not rise above $1.29 an ounce. At this price the ratio would be 16 to 1. The silver bullion was to be paid for by new Treasury notes which were legal tender and redeemable in coin. To increase their acceptability the following important clause was inserted:

" . . . it being the established policy of the United States to maintain the two metals on a parity with each other upon the present legal ratio, or such ratio as may be provided by law."

This so-called "parity clause" was the first legislative recognition of the silver dollar as credit money for the value of which the government was responsible. It did away with the "limping standard." As we have seen, the Act of 1900 definitely declared that the government's policy was "to maintain the parity of all forms of money issued or coined by the United States." This intention was reasserted in the Federal Reserve Act of December 23, 1913.

17. *Gold is not ideal money.*—We have seen that gold does not satisfactorily perform its functions because of fluctuations in value. On the whole, however, it is the best standard that has so far been used. The bimetallic standard was not effective because of our failure to keep the mint ratio at the market ratio. If effective, this standard would be less exposed to changes in value than the monometallic standard, as a fall in the value of gold might be offset by a rise in the value of silver and vice-versa. The bimetallic standard might be made effective if the principal nations of the world should agree to use it and to adopt a common mint ratio. Under such circumstances the great demand for monetary use would be the ruling factor in the market, thus forcing the market ratio to correspond to the mint ratio. Several unsuccessful attempts have been made to effect an international agreement. It is to be hoped that the elections of 1896 definitely determined that this nation will never again attempt to maintain a bimetallic standard without the support of such an agreement.

Proposals have been made for various kinds of standard money. For the present it is sufficient to state that there is no prospect of an early adoption of any new standard.

CHAPTER II

NATURE AND USES OF CREDIT

18. *Definition of credit.*—The word "credit" is derived from the Latin *credo,* "I believe." The term is employed in various ways in popular speech and in the business world. If a man acquires a reputation for paying his debts when due it is easy for him to borrow money. We say that he has good credit. The bookkeeper uses the term to denote the opposite of "debt" or "debit" on his books—to indicate that something is due a person or an account. If a pitcher wins a baseball game, we "give him credit" for the victory. John Stuart Mill in his "Political Economy" defines credit as the permission to use another's capital. In the courts the term is defined as a "right of action." A man who gives a promise to pay gives a right of action against himself. The holder of the promise may sue him for payment and the law will enforce the contract.

These definitions are correct, but they do not set forth the relation of credit to money. When viewed as a medium of exchange, credit is merely a promise to pay money. The promise may be written or printed on paper or stamped on metal. A promise to pay money, when printed or written, or given any tangible form, is commonly called a "credit instrument." A promise to pay money, when stamped on metal, is sometimes called "token money." The coin is simply a kind of credit instrument. The promise is not ordinarily stamped in full on the metal. It may be expressed or

implied in the statute which authorized the coinage or in a later statute. Promissory notes, greenbacks, silver dollars, etc., are, for example, credit instruments. This definition tells us what credit is as a medium of exchange.

19. *Origin of credit.*—Credit comes into existence as a result of an exchange. Comparatively few purchases are made with gold, as credit in some form is usually more convenient. Smith may obtain goods from Jones by giving in exchange a promissory note which calls for the payment of money in, say, sixty days. The note is a credit instrument. He may not write the promise on paper. A record of the transaction may merely be noted on Jones' books and no credit instrument originated. This form of credit is known as "book credit."

At maturity the obligation may be discharged by a payment of gold or some other form of money. The payment may be made with a check. In every instance, except where standard money is paid, the debt will be cancelled by the payment of a credit instrument. If a check is used a new credit instrument must be created for the purpose.

20. *Basis of credit.*—The basis of credit is confidence. The very word implies belief. This confidence is twofold in nature. The lender must believe in both the ability and willingness of the borrower to pay his debt. No one will lend to a man unless he feels sure that the borrower intends to repay the loan. To be sure, the law will enforce the intent, but litigation is expensive and troublesome. Then, a man who is intent upon fraud can often find a way to circumvent the law. Honesty is the first quality we demand in a borrower.

But honesty alone does not entitle a borrower to a

loan. He must show ability to repay. If a man has in his possession $100,000 worth of salable property, he can usually obtain a $10,000 loan without much difficulty by pledging a part of his property as security. From this fact, some would say that credit is based on goods. This statement is true only in so far as the possession of goods is the quality which gives a man the ability to borrow. As a matter of fact, most loans are not based on the possession of goods. The lender is not primarily concerned with the wealth of the borrower when the loan is made, but with his prospective wealth at the maturity of the contract. Business ability coupled with character forms the basis for the great bulk of credit. The men with reputations for honesty and ability to make money constitute the most desirable class of borrowers.

The confidence which underlies credit is not altogether personal. A man's ability to make money usually depends upon his ability to sell goods. This in turn is largely dependent upon the people's ability to buy goods and to pay for them. The credit of every individual is, then, more or less determined by general business conditions. Any man can borrow money more easily when times are good and when the demand for goods is exceeding the supply. It now appears that credit is limited, not merely by a community's wealth, but by that plus the lenders' estimates of its power to produce wealth. Honesty, wealth, ability to make money, general prosperity—these are the factors of that confidence which underlies every business transaction in which credit is involved.

Sometimes gold is said to be the basis of credit. The promissory note which Smith gave to Jones may be paid by a check. The check may be paid by a bank

note; the bank note by a greenback; the greenback by silver dollars—and so on, until gold is finally paid. Thus, while one credit instrument may be redeemed by another through a long series of transactions, there does come a time when gold is needed. Gold is the ultimate money of redemption and will remain so as long as it is the only world-wide medium of exchange. In most parts of the United States we seldom see a gold coin and most of us are prone to forget that underneath all our many millions of credit promises there rests the dollar of 23.22 grains pure gold. If doubt as to the convertibility of these promises into gold should once enter our heads, no matter how rich in goods the country might be, the whole mass of credit would begin to melt away. If doubt became certainty the wheels of industry would stop turning until the law could give a new definition to "dollar" and provide a new way of redeeming our promises to pay. Upon a small foundation of gold we have erected a great inverted pyramid of credit. We cannot exercise too much care in keeping this mass at equilibrium. In a sense, then, credit is based on gold or whatever may be the money of ultimate redemption.

21. *Barriers to the use of credit.*—Anything which tends to destroy confidence or to hinder its development is a barrier to the use of credit. Ignorance is, perhaps, the chief foe to confidence. Men in one community are slow to open credit relations with men in another locality because it is difficult to determine their financial standing. This difficulty is all the greater between people of different countries. Frequently business men of good character, great ability, and sound financial condition are unable to obtain credit in their own community. What is their trouble? They have simply

neglected, or have never learned how, to convince their business associates of their true standing.

Law and custom play no small part in the development of credit. The business habits of a whole people may be such as to discourage the placing of confidence in any of them. Fortunately, such instances are rare. A foreign banker, visiting in America, a few years ago, was struck with wonder at our extensive use of the check system. He remarked that if a debtor should offer to pay a debt with a check in his own country, the creditor would at once suspect that he had no money in the bank; and added that, furthermore, the creditor probably would be right. Business integrity is sometimes more highly developed in one country than in another. The laws of some countries make collection by legal process exceedingly difficult. It behooves any business man, about to open trade relations with a person in another country, to inform himself, first of all, as to the customs and laws under which his customer does business. Such information is by no means easy to get in every case. The modern credit man and the federal consular force are doing a great service in this field —a service of which many business men have not yet learned to avail themselves.

Wars and industrial crises often temporarily break down the delicate machinery of credit. A Mexican revolution may turn the best business man in that country into an undesirable customer. A panic, such as that of 1907, will destroy the credit of many whose financial standing has never before been questioned. The bonds of credit have become world-wide through the influence of the telegraph and modern facilities of transportation. A war scare in the Balkans, a chain of bank failures in Brazil, or a famine in India will now be felt

in all the marts of the world. The barriers to credit are crumbling and, at the same time, the business of every man is being brought into closer and closer touch with remote forces of whose very existence he may have been utterly ignorant.

22. *Transfer of capital.*—The capital of a country is built up by the savings of its people. Not every person is in a position to invest his savings in a productive enterprise with advantage to himself. On the other hand, there are always enterprising men, called *entrepreneurs* by the economist, who have in mind some fertile field for the application of capital. The bringing together of these two classes of people is the great work of credit.

The *entrepreneur* must have buildings, land, machinery—a great variety of capital goods which make up the plant and equipment of the business—and he must have raw materials and the services of employés. He must prepare for the various expenses of the business—insurance, taxes, etc. If he has not sufficient capital himself and cannot induce other capitalists to share with him the risks and profits of his business, he must borrow from others. He does not borrow land and machinery; nor does he borrow money. He borrows the right to demand these goods and gives in exchange some kind of credit instrument—a promissory note, perhaps, or a bond or a mortgage. He really gives his own credit for the well-known credit of another. Credit thus enables men of brains, energy, and skill to get possession of a country's capital and devote it to productive uses.

23. *An aid to production.*—It now appears that credit is an aid to production. Credit is not itself a thing or commodity—it is merely an agency of transfer. No more capital, no more goods exist after credit is given than before. Nevertheless, the use of credit does

lead to an increase in production, for it brings the productive agents of a country into the possession of those who are most competent to use them. Just as the railroad has rendered the rich prairies of Kansas and Nebraska available to the farmer, so does credit render available to the modern business man remote hoards of capital that would otherwise be idle. It is always a fair inference that a country possessing a highly developed credit system is making active use of its productive resources.

An examination of the cotton industry will serve to illustrate the way credit promotes production. The process of producing a cotton garment from the raw material requires months and the participation of many separate industries before it reaches the consumer. The raw cotton must be grown from the seed, ginned, baled, transported, carded, spun, woven into cloth, cut and sewed into the form of the garment, transported and sold to the jobber, then to the wholesaler, to the retailer and finally to the consumer. Practically every step involves an exchange in which a payment is necessary. For example, a cotton-mill owner cannot perform his part in the chain of production unless he can possess himself of the raw cotton and hold it long enough to make it into cloth. If he has no equivalent to exchange for the cotton, he is unable to transact business. The owner of the raw cotton, perhaps, cannot wait sixty or ninety days for his pay, and he cannot, therefore, accept the credit of the mill-owner in exchange unless he can sell that credit for cash. The credit of the mill-owner, in the form of a promissory note, is not a medium of exchange which the cotton dealer can use to pay his obligations. The bank, however, stands ready to buy that note and give for it something which can be used as a means of

payment. The bank has made possible the exchange of cotton, and the industry of the country has been aided.

24. *A substitute for gold.*—Every time credit is brought into play an exchange is effected which, without credit, either would not have taken place at all or would have necessitated the use of gold. Credit thus economizes the use of gold. This is no mean service. Gold is an expensive medium of exchange. Each time it is handled a certain amount wears away and is lost forever. The material of which a credit instrument is made costs little. To guard gold is expensive. Certain kinds of credit instruments, such as checks and promissory notes, are ordinarily worthless in the hands of any but the rightful owner. It has been estimated that over ninety per cent of our exchanges are effected without the use of gold. Our gold supply is used primarily as bank reserves or as a reserve against government credit instruments or in payments of debts abroad. During the fiscal year ending June 30, 1913, we exported over $75,000,000 and imported nearly $70,000,000 of gold.

25. *Credit of general acceptability.*—We have seen that some credit instruments, like greenbacks and silver dollars, command the people's confidence throughout the United States and are thus able to perform the functions of money within the boundaries of this country. Credit of this kind may be called credit of general acceptability to distinguish it from other forms of credit having a more limited radius of circulation. It is credit money.

We know that credit money should not bear interest and that it should be payable on demand. We may now state the chief qualities of good credit money: (1) it must be issued by a promissor in whom all the people have confidence; (2) it must be in convenient denomina-

tion; (3) it must be easily recognizable; (4) it must be difficult to counterfeit. The money supply of the country should expand and contract in response to the demands of business. Under a commodity standard the quality of elasticity can be obtained only by making credit money elastic. When freely coined, the supply of gold coin depends not so much upon the needs of business as upon the yield of the mines. The question of elasticity will be considered later.

26. *Credit of limited acceptability.*—Checks, promissory notes, bills of exchange, etc., may be called credit of limited acceptability. Before accepting a check in payment we ordinarily require an indorsement by the person who offers it. We consider the credit of the indorser as well as that of the original drawer and drawee of the check. This custom limits the circulation of checks and prevents them from serving as money. In England the custom is slightly different. There, the indorser's credit is secondary, emphasis being laid primarily on the credit of the original drawer. This places the check one step nearer to the bank note in point of acceptability. But even in England the check does not attain a circulation wide enough to justify its being classed as money. Bank credits are the most important form of credit instruments in this country and furnish to the business world a medium of exchange often described as "deposit currency." Checks, within their limited field, are the most efficient medium of exchange that we have.

A promissory note is an unconditional promise in writing to pay a certain sum of money at a stated time. It is the simplest form of credit instrument and is probably the first one that came into use. For the protection of the holder of a promissory note a body of law exists

in every civilized country, which aims to provide for all possible contingencies. A note, for instance, is a negotiable instrument if made payable to order or to bearer. The law of negotiable instruments is explained in Volume XII. For the present purpose it is sufficient to call attention to the fact that such an instrument will not be accepted without determining the credit of the maker or indorser. A promissory note, therefore, is capable of serving as a medium of exchange only within a limited field. It cannot serve as money. Its main purpose is to serve as an instrument for the transfer of capital.

The bill of exchange, or commercial draft, is an unconditional order in writing by one person to another requiring the payment of a certain sum of money. A foreign bill orders the payment of money in a foreign country. When the drawee has "accepted" a bill it becomes his promissory note and can be negotiated. Various forms of credit, such as postal-money orders and the money order of express and telegraph companies, serve as a means of payment in a limited way.

The "book account" is a general name given to all forms of credit of which the record is a mere matter of bookkeeping. It includes the accounts of business men with their customers. It includes also the accounts kept by operators on stock and produce exchanges, many of them based on a mere nod of the head or a crook of the finger as the parties are standing in the midst of a howling mob. When a man buys anything and has it "charged," he buys it with credit in the form of a "book account." This kind of credit is probably the means of effecting more exchanges in this country than any other single form. Sometimes men borrow from the bank, assigning their book accounts as security.

They are said to "assign their accounts" to the bank. This kind of borrowing is not generally resorted to except under the most desperate circumstances. Book accounts are not credit instruments.

We have now considered all the common forms of credit of limited acceptability. Some have a wider field of circulation than others; none are universally acceptable. Because of their limited acceptability, they have a short life and are generally presented for payment soon after they are received. It is evident, therefore, that any increase in the volume of these credit instruments necessitates an increase in the reserve of money which secures their ultimate payment. While, as we have seen, not every check is liquidated with money, yet experience has shown that the amount of legal-tender currency in the vaults of a bank should increase in proportion as the volume of its check transactions increases.

27. *The work of bonds and mortgages.*—In the foregoing analysis of credit instruments only those have been considered which are particularly available as a medium of exchange or means of payment, thus serving in a sense as a substitute for money. It must not be forgotten that the primary purpose of credit is to effect a transfer of capital from the hands of men who do not want to use it to the hands of those who do want to use it. To effect such transfers is the purpose, indeed, for which banks exist. The use of credit as a common medium of exchange is secondary and incidental. Some of the forms of credit most useful for the transfer of capital are not well adapted to serve as a medium of exchange. Such, for example, are the mortgage bonds of corporations and the interest-bearing bonds of nations, states, counties and cities. These are credit instruments and are transferable, but their value changes

as the date of their maturity approaches, and a transfer of ownership is attended by time-consuming formalities. For these reasons they do practically no service as a medium of exchange. As a claim upon property they are an acceptable security for loans by banks and so lead to an increase in the volume of deposit currency, but mortgages and bonds themselves seldom pass from hand to hand as a means of payment.

28. *The rôle of the bank.*—Banks are dealers in credit. A common notion prevails that banks are dealers in money. This is incorrect. Just as a hardware store deals in hardware, just as a grocery store deals in groceries, so a bank deals in credits. We have seen how a bank promotes industry by buying credit instruments from its customers. Besides furnishing a market for credit already in existence, banks engage in transactions in which credits are created by receiving deposits and making loans. In exchange for cash deposited, the depositor receives the promise of the bank to repay this sum on demand. This is evidenced by an entry in the pass book of the depositor. The bank redeems its promise either partially or entirely whenever it accepts a check drawn upon it by the depositor.

In loaning money, the bank may exchange cash for a promise by the borrower to pay, either on demand (a call-loan) or at some stated future time (a time-loan). This, however, is not the usual transaction.

Ordinarily, when a bank makes a loan, it is to a regular customer who has an account. In this way the borrowing customer receives, in return for his promise to pay, a credit to his deposit account against which he may draw checks. In this transaction the bank exchanges its own promise to pay money on demand for the promise of the borrower to pay a larger sum at some

definite time or, if it is a call-loan, on demand. The whole matter is simply an exchange of credit. It is because the borrower rarely takes cash from the bank, but prefers to accept a deposit credit, that the loan and deposit items of the bank statement usually correspond so closely in amount. Most of the deposits in a bank are created in this way; the rest are created by the deposit of cash or cash items. The deposit item of a bank is not, therefore, a record of the sums of money brought into the bank by customers, although it includes such sums; it represents, rather, the demand liabilities of the bank (excepting circulating notes outstanding)—that is, the sum it may be called upon to pay at any time.

It is clear, therefore, that a bank does not lend cash. It exchanges credit. As a matter of fact, the borrower does not take money when he gets a loan, but takes instead a credit on the books against which he can check; that is, he accepts the promise of the bank to pay on demand, which is a deposit credit. The very fact that a deposit credit is payable on demand does not make it any the less a credit.

As a medium of exchange, credit is superior to gold in that it does not involve the transfer of intrinsically valuable commodities used at great cost. The function of the bank is to promote the use of this inexpensive substitute for gold—credit. It does so by affording a market wherein credit can be bought and sold. The bank will also exchange its own well-known credit for the less known credit of its customers, thus promoting industry.

CHAPTER III

RELATION OF MONEY AND CREDIT TO PRICES

29. *Value and price.*—The value of a thing is its command over other commodities in exchange—the ratio at which it exchanges for other goods. The value of a bushel of wheat is said to be twice that of a bushel of oats. The price of a commodity is its command over money in exchange. Price, then, expresses a ratio to money only, while value expresses a ratio to all other things. The prices of all goods may be changed at one time through a change in the purchasing power of money. During the fifteen years preceding 1914, the prices of goods rose on the average about fifty per cent. We say that the level of prices rose. The level of values —i.e., the average value of all goods—can never change. From the very nature of the definition it is apparent that any change in the value of one thing is always offset by an equal and opposite change in the value of another. Two men cannot mount into the sky by rising alternately one above the other on a seesaw.

Money has no price. It is, itself, the standard of prices. A thing cannot be exchanged for itself. In any country where gold is freely coined into money, gold cannot properly be said to have any price. In the United States, it is customary to speak of $20.67 as the price of an ounce of gold, for that is the sum of money into which an ounce of gold is coined. Price is here incorrectly used. The expression "mint price," which is often employed, is less likely to produce confu-

sion. It is nearer the truth to say that an ounce of pure gold *is* $20.67. The one cannot, in the ordinary sense of the word, be the price of the other.[1]

Business men are interested primarily in prices, not in values. Price is a concrete term; value is general. The merchant wants to know how much money he can get for a bolt of cloth; he does not ask how many bushels of potatoes, or gallons of oil, or bags of flour he can get. After he secures the money, he may then exchange it for such goods as he desires. Business is carried on in terms of money.

30. *The value of money.*—The value of money presents no peculiar problem. Its value, like the value of anything else, depends upon the interaction of demand and supply. The word "interaction" is significant. It indicates that both demand and supply operate at the same time to fix the value of money. Many economists have erred in thinking that one or the other operates by itself. A pair of scissors cuts only when the two blades come together. One blade is as important as the other. Suppose we place one blade on the table, keeping it stationary, while the other is brought down against it. A child looking on might think that the moving blade alone is responsible for the cutting. Some people have seen only one blade of the scissors in motion, and have assumed that it alone operates in the determination of value. Sometimes either demand or supply may be fixed; generally both are changing.

To say that the interaction of the demand for and supply of money determines its value is to say little. This is an axiom. It is necessary for us to go back of this and examine the forces of demand on the one side and of supply on the other.

[1] See J. F. Johnson, "Money and Currency," p. 12.

31. *Demand for money limited.*—There is a definite demand for money at a given time. This statement at first seems strange to some who have been accustomed to think that money is the one thing of which they could never have too much. They confuse money with wealth. On account of its constant and universal use and its easy convertibility into other forms of wealth, money possesses a peculiar fascination for men. The poor man thinks of his needs in terms of dollars and cents, and is sure he wants all the money he can get. Very few men have all the good things of earth they want and these things can be bought with money. They think it is money they need, whereas what they really want is better houses, better clothing, more comforts and more luxuries. The thing of which nobody ever has enough is wealth in general. Money, instead of being the one thing of which we never have enough, is the one form of wealth which lies heaviest on our hands and which we are the most anxious to be rid of. Indeed, the only intelligent thing to do with money is to part with it. Any other use of it is wasteful. There are, of course, foolish ways of getting rid of it and wise ways; but to be gotten rid of by exchange—that is the mission of money. For a man to have money about him which he does not use or expect to use is as uneconomic and extravagant as it would be for a man who is afraid of powder to own a gun.

The notion is old that money is the essence of all wealth and that an excessive supply is inconceivable. In the sixteenth and seventeenth centuries all the nations of Europe struggled to get possession of the precious metals.

Even today a demagogue occasionally succeeds in stirring up among the unthinking masses a clamor for

more money. Herein lies the danger of fiat money. The people, especially in a republic, may force the government to excessive issue. Every man and every community needs a certain amount of money at a given time just as every farmer needs a definite supply of implements. Any excessive supply is gotten rid of in exchange and usually at disadvantageous terms.

32. *Sources of demand.*—How much money is needed and how does this need arise? We have seen that money is said to perform four services. Money is a standard of value, but this function does not create a demand for money. The gold dollar is the standard of value in the United States, yet we do not even coin it. The use of money as a standard of deferred payments indirectly affects its value through affecting its use as a store of value. The best illustration of this is the bank reserve. A bank promises to pay its depositors a certain sum of money on demand. Consequently every bank tries to keep on hand enough money to meet these obligations as they arise. In the same way every man tries to have at hand enough money to meet his current requirements. The need for pocket money, till money or bank reserves constitutes a real demand for money.

Just as various functions of money spring from its use as a medium of exchange, so does the demand for money arise directly or indirectly from the demand for it as a medium of exchange. The banker keeps money in reserve because he foresees a need for it as a medium of exchange. Most of the demand for money comes directly from the demand as a medium of exchange. If the commerce of a country increases there is an increased demand for money to effect exchanges and the value of money tends to rise. A rise in the value of money means a fall in general prices and vice versa.

The total demand for money within a given time is measured by the total volume of exchanges which are effected by money plus the need for money as a store of value during that period. The volume of exchanges in any country depends upon the number of people, on their productive capacity, on the organization of business, and on the extent to which the division of labor has been carried out. The demand for money tends to vary, therefore, whenever changes take place in any of these factors.

No one factor is in itself a scientific measure of demand. Certain politicians in the United States have recommended legislation intended to bring about an artificial regulation of the money supply on the basis of changes in population. This view of the subject overlooks other factors in the demand for money quite as important as population, and is therefore crude and unscientific. Some have thought that the total amount of goods brought to market measures the demand for money. This is a mistaken notion. Some of the goods are not sold, some are exchanged by barter, some through the medium of credit of limited acceptability. Improvements in business organization which reduce the number of times a good is bought and sold in its journey from producer to final consumer reduce the total volume of exchanges and so tend to lessen the demand for money. On the other hand, the increasing division of labor, which is a feature of modern industrial evolution, has a tendency to increase the need for a medium of exchange. An increase in the use of barter or in the use of credit of limited acceptability tends to lessen the demand for money.

33. *Supply of money.*—When speaking of the supply of money we have in mind the number of money units.

The supply of money must not be confused with the supply of money utility. If the supply of money units were fixed in some way and the demand for money increased, the greater need would be met by the original supply. Each unit of money would have a greater utility. The value of money would rise and prices fall. But doubling the demand for money would not mean an immediate halving of prices. There would be an interim of painful adjustment during which business would suffer. This illustration is given to make clear the difference between the supply of money and the supply of money utility.

The conditions governing the supply of money are much simpler than those governing the demand. The supply of fiat money is regulated arbitrarily by the government, and its advocates hold that its value may therefore be kept stable at any desired level so that the prices of goods need never be affected by changes in the value of money. Under a régime of scientifically issued fiat money, the level of prices would never materially change. This does not mean that the price of a given thing or service would always remain the same. The price of any single commodity would vary according to the supply of and demand for that commodity. The additional disturbing element of changing money value would be removed.

The supply of ideal credit money is regulated by the legitimate needs of business. Credit, to attain general acceptability as money, must be of high order. When times are prosperous and the volume of business is growing, more of this high grade credit will come into existence. The Federal Reserve Act of 1913 provides for the issue of ideal credit money. Bank notes may now be issued upon the basis of good commercial paper. The

volume of this commercial paper, and thus the volume of notes, depends upon the condition of business in the country. Unfortunately, the amount of federal reserve notes will, for a long time at least, be only a small percentage of the total amount of money in the United States. If most of the money supply of a country consisted of ideal credit money which would adjust itself automatically to the volume of business, the general level of prices would not fluctuate so seriously. Such a community would still be influenced by price fluctuations in other countries, but the course of its commercial life would be comparatively smooth. Few countries have currency systems that are saturated with ideal credit money. Our national bank notes, greenbacks, silver coins, etc., do not expand and contract in volume according to the needs of business. The supply of credit money in the United States is regulated more or less by artificial means. The supply of government credit money is always fixed by artificial means and bears slight relation to the volume of commerce. No government has yet perfected the necessary machinery for the issue of ideal credit money.

How is the supply of commodity money determined? We will take gold as an example, since it is the only commodity used as money throughout the civilized world. Economists have formulated the following law: The supply of a commodity produced under conditions of free competition is so regulated that its value in the long run coincides with the cost of producing it under the most unfavorable conditions. Capital and labor gravitate toward those industries which yield the highest profits. If any commodity is selling at a price yielding extraordinary profits, additional capital and labor are attracted to that industry, the supply is increased, and

the value is forced down. On the other hand, if for any reason the selling price of an article falls below cost, producers curtail production, the supply is reduced and the value rises.

The truth of the law of cost in the case of most commodities, especially those produced under well-known conditions, is so clear and well established among business men that it needs no demonstration or illustration. Its application to a metal like gold, however, is not perfectly evident and is not generally understood. Prospectors often continue the search for gold long after profits have ceased, in the mere hope of making a lucky strike. Gold mining is now carried on in a more scientific manner than formerly, however, and capital and labor invariably leave the gold fields when these cease to be profitable. The world's stock of gold tends to increase more rapidly when the value of gold is rising than when it is falling.[1]

Two more questions remain to be answered. First, how much of the gold that is mined during a year will be coined into money and how much will go into arts? This depends upon the relative demand for money and for gold objects of art. When prices are rising—i. e., when the value of money is falling—gold tends to go into the arts and vice versa.

The second question is: How much of the gold supply of the world will a particular country be able to secure?

"When gold (or silver, or any other commodity) is freely used as money, the supply of money in a country is automatically regulated in such a manner as to keep the value of gold practically the same in all countries of the world. This automatic regulation of the supply is one of the chief advantages of commodity money. It is effected through the medium of price.

[1] See J. F. Johnson, "Money and Currency," p. 73 et seq.

When a country using gold as money has a larger supply in proportion to its needs than other countries, the value of gold in that country falls below its level in other countries and the prices of goods there are correspondingly higher. Sales to foreigners decrease and purchases from foreigners increase until a balance of indebtedness is created which compels an exportation of gold in settlement. The loss of gold, by reducing the supply of money, raises the value of money and lowers the level of prices in the country losing it, while tending to raise the prices in the country to which it has gone. By this simple process, gold always seeking those markets where its purchasing power is greatest, the supply of money in those countries using gold as money is automatically adjusted, so that its value in all tends to be the same. A country is said to have "too much money" when its prices are above the level of prices in other gold-standard countries, and "too little money" when its price level is below that of other countries; for in the one case gold buys less in that country than elsewhere, and in the other case more. In either case, by the export or import of gold the readjustment is effected without conscious effort on the part of men. What is said here of gold applies with equal truth to silver in all countries where it is freely coined into money." [1]

This question will be better understood after the principles of foreign exchange have been studied. We observe that, while the use of commodity money does tend to keep prices on a level in various countries, it does not keep the price level of the world steady. The use of commodity money has made possible the great fluctuations in the level of prices with which we are familiar.

34. *Money and prices.*—The value of money is reflected in the level of prices. If the value of money is falling, the level of prices is seen to be rising and vice versa. To crystallize the proposition we will express it in a mathematical equation. Let M represent the supply

[1] J. F. Johnson, "Money and Currency," pp. 73, 74.

of money; R, the rate of turn-over of the average unit of money; N, the number of exchanges which are effected with money during a given period; and P, the average price or the amount of money used in each exchange. The relation of money to prices is expressed by the equation: MxR=PxN. A little study will show that the total supply of money in the United States multiplied by the number of times each dollar turns over in the course of a year must equal the average amount of money used in each exchange multiplied by the total number of exchanges effected by money in the United States during that year. If any three factors of the equation are known we can determine the fourth.

By transposing the equation we have: $P=\frac{MxR}{N}$.

Stated in this form the equation is useful in explaining changes in the price level which is represented by P, the average price. Evidently an increase in the supply of money (M) or in its rate of turn-over (R) tends to raise the level of prices (P), while an increase in the number of exchanges (N) tends to lower the level of prices. The converse of these propositions is equally true.

It must be clearly understood that this equation applies only to exchanges which are effected by the use of money. If the people of the United States should begin to trade more by the method of barter, the number of exchanges in which money is needed (N) would be reduced and prices would tend to rise. If the people of the United States should begin hoarding money, as the people of India do, the supply of money would be reduced and prices would tend to fall. In general it may be said that any force which lessens the need for

money or increases the supply of money tends to raise prices and vice versa.

35. *Credit of limited acceptability and prices.*—The most important substitute for money is credit of limited acceptability. An increase in the use of book credit or of checks lessens the need for money and raises prices. Book accounts are ordinarily liquidated by the use of checks or money and thus only delay the call for money or checks. Checks, on the other hand, are often used in effecting two or three exchanges independently and are then placed on deposit at a bank, thus effecting a material reduction in the need for money.

Deposit currency is so important in the United States that we will do well to take account of it in our price equation. Let C represent the total bank deposits in the United States; and R^1 their rate of turn-over—i. e., the average number of times which each dollar of deposits is checked out in exchange within a given period of time. If N is now made to include the total number of exchanges effected by money and checks together and P the average price in such exchanges, we have the following equation: $MxR+CxR^1=PxN$. Transposing,

$$\text{we have } P=\frac{(MxR)+(CxR^1)}{N}.$$

In the United States the volume of exchanges effected by checks is estimated to be about nine times the volume effected by money. So it is evidently worth while to include checks in our equation even at the expense of making it slightly more complicated. In attempting to explain changes in the price level, all five of these factors must be taken into account. We must not neglect the volume of trade while considering changes in the

supply of money; nor must we fail to note changes in the rate of turn-over of money and deposits.

36. *Statistics of money and credit.*—How can we discover and measure changes in the factors of our equation? In no case can we judge accurately; at the best, only an intelligent estimate can be given. The federal treasury department issues a daily circulation statement which is an estimate of the amount of money in circulation in the United States. This is only an estimate, as no one can ever tell how many coins have been melted or lost, or how many greenbacks, bank notes or certificates have been burned or destroyed. For example, it is estimated by the treasury department that the Chicago fire destroyed $1,000,000 of greenbacks. No definite figures can be obtained. The following method has been used for obtaining a figure for the rate of turn-over of money: First find the sum of all money deposited in banks, plus the total money wages paid, plus a small miscellaneous item. This amount equals the total volume of money used—the (MxR) of our equation. Divide this by the supply of money (M) and we have R—the rate of turn-over.

Statistics of bank deposits may be obtained from time to time through bank reports to the Comptroller of the Currency and the various state bank departments. No adequate means now exists for measuring the rate of turn-over of deposits. Some have sought to gauge the check business by observing the clearings in and out of New York City. This is evidently no adequate measure of the check business of the entire country. Not all the checks of New York City go through the Clearing House, to say nothing of the vast volume of checks in other parts of the country which never reach New York. The American Bankers Association, through

its committee on clearing houses, is endeavoring to gather statistics from the individual banks of the checks charged by them weekly. This will afford a much better barometer for gauging the check business and the activity of deposits than any heretofore used.

It is utterly impossible even to guess intelligently at the number of exchanges effected in the course of a year. Professor Irving Fisher has devised a scheme for measuring changes in the volume of trade. He does not pretend to calculate the absolute number of exchanges. Taking the year 1909 as a base year he reckons a unit of trade as any quantity of goods worth one dollar according to the prices of that year. The comparative figure for the volume of trade of each successive year is based on railroad gross earnings and on shares traded in on the New York Stock Exchange.

In general, it may be said that no means exists for arriving at an absolute quantitative measurement of any of these five factors. The methods which we have just briefly indicated are, however, fairly satisfactory for detecting and measuring changes from year to year. While the estimates may be nearly correct relatively—i. e., so far as year to year comparisons are concerned—there is probably a considerable absolute error. After all, change is the significant thing.

37. *Practical application.*—What is the practical value of this discussion? We derive a certain satisfaction from being able to explain the events of the past. We should hope rather to foresee the events of the future. If we observe that the supply of money is increasing while the other four factors remain comparatively fixed, we expect a rise in prices. The degree in which we can predict changes in the price level depends upon the certainty with which we predict changes in

these five factors. As the data concerning all these factors and certain exterior factors, such as hoarding, barter, etc., become more complete, our guesses at the future will more nearly approach predictions. Business will be upon a more scientific basis. Naturally the man who can foresee with reasonable certainty will have an advantage over his less fortunate rivals in business.

At present, these equations should be used primarily for the purpose of illustration. The lack of sufficient data renders it impossible to predict price changes with dependable accuracy. Even if we had at hand perfect information regarding the five factors of the equation, much additional knowledge would be necessary. The extent to which barter and the less important substitutes for money are used is always a matter of conjecture.

38. *Price tables.*—In order to observe changes in the general price level, price tables have been constructed. The ideal price table would, of course, represent the average price changes of all commodities, the exchange of which creates a demand for money. Since this is impossible, the most practical method is to take a certain number of representative commodities. Such a table must not be confined to a few commodities nor to one class because there might be special causes for a change of prices in that particular class. The table should be composed of such a variety of commodities that the influences affecting the value of the particular classes will counter-balance each other. We give below a sample in outline of a price table constructed to show the price changes over a period of two years:

	1890	%	1892	%
Wheat	$1.00	100	$1.10	110
Cattle	50.00	100	60.00	120
Knives	20.00	100	15.00	75
Silk cloth	150.00	100	120.00	80
	4)	400		385
		100		96¼

In this table we have made a hypothetical list of only a few prices in 1890 and 1892. These prices should preferably represent an average for a period of time in order to avoid any accidental fluctuations due to the season or other temporary causes. The prices in 1890 have been made the basis at 100 per cent and the increase or decrease calculated with reference to this base. This table shows that while some prices advanced, others fell and that the general level dropped 3¾ per cent. The percentages 100 and 96¼ are called index numbers.

39. *"Weighting" of tables.*—It may be objected that in this table we have given exactly as much importance to knives as to wheat, whereas we know that a change of one per cent in the price of wheat would have a vastly greater effect on the demand for money than a change of 100 per cent in the price of knives. To correct this fault a system has been devised for "weighting" the various items of a price table. The principle of weighting is to find some basis for estimating the volume of exchanges of the particular items. Figures for total production or consumption are usually taken as the basis.

To weight our price table it would be necessary to arrange the four items so that wheat would have an influence on the result, let us say, one hundred times as great as knives; that cattle have an importance fifty

times are great as knives; that silk cloth have an importance ten times as great as knives. The table modified to conform to this weighting arrangement is given below:

		1890	1892
Wheat	100×	$1.00=10000	$1.10=11000
Cattle	50×	50.00= 5000	60.00= 6000
Knives	1×	20.00= 100	15.00= 75
Silk Cloth	10×	150.00= 1000	120.00= 800
	161)	16100	17875
		100%	111 4-161%

While the weighting of this price table seems to produce a great effect on our sample table, yet in making actual tables where the number of commodities is much greater the differences shown by simple and weighted tables are slight. Since the total result of any price table is but an approximation, it is doubtful whether the weighted price tables are much more valuable than the simple tables.

The principle of weighting is important when changes in the price level for certain purposes are being observed. For instance, if we desire to know whether the average cost of living for the workingman's family has increased or decreased, the price table should not only show exclusively the items which enter into the consumption of the family, but the items should be weighted to show their relative importance in the family budget. Tables constructed upon this principle were prepared by Professor Falkner in the most elaborate investigation of prices that has ever been undertaken in this country. The report was prepared for a Committee of the Senate.[1]

[1] (Report by Senator Aldrich for the Committee on Finance, March 3, 1893, Senate Document, 52d Congress, second session, No. 1394, "Wholesale Prices, Wages and Transportation.")

40. *Falkner index number.*—For this index number, lists of prices of 90 commodities were covered from 1840 to 1891; and 223 commodities were covered from 1860 to 1891. The investigation was conducted with great care and expense, the prices being ascertained from an examination of merchants' accounts. Prices for the year 1860 were taken as the base or 100 per cent. It will be seen from the table which is reproduced herewith that the average prices of all the commodities considered had decreased to 92.2 in 1891.

It will be noticed that prices during the Civil War period were extremely high, the percentage for the year 1865 being 216.8 per cent. This extraordinary rise is due to the inflation of the currency by an excessive issue of government paper money. It has been proposed to reduce the average prices of the inflation period to a gold basis by allowing for the depreciation of greenbacks in terms of gold. The first two columns of the table show the extent to which greenbacks were depreciated; they do not show to what extent the extraordinarily high prices of the Civil War period were due to the inflated paper currency. No one can say what the actual level of prices would have been if gold had remained in circulation as the standard of prices. As we have said before, greenbacks were the standard of prices during the period. The demand for the greenback as money was practically limited to the northern states during the war period. Moreover the volume of trade in the North must have been heavily reduced through the crippling of her productive agencies. This factor would tend to lessen the demand for money and to raise the prices. The excessive issue of greenbacks was not the only factor leading to the rise in prices.

The index number prepared by Professor Falkner

COMPARISON OF VARIOUS PRICE TABLES

Year	Falkner, Gold (1860 = 100)	Paper (1862–1878) (American)	U. S. Department of Labor (1890–1899)	Sauerbeck (Base 1867–1877) (English)	"Economist" (Base 1845–1850) (English)	Soetbeer (Base 1847–1850) (German)
1860.....	100.			99	123	121.0
1861.....	100.6			98	125	118.1
1862.....	114.9	117.8		101	131	122.6
1863.....	102.4	148.6		103	159	125.5
1864.....	122.5	190.5		105	172	129.3
1865.....	100.3	216.8		101	164	122.6
1866.....	136.3	191.0		102	162	125.8
1867.....	127.9	172.2		100	137	124.4
1868.....	115.9	160.5		99	117	122.0
1869.....	113.2	153.5		98	122	123.4
1870.....	117.3	142.3		96	122	122.9
1871.....	122.9	136.0		100	128	127.0
1872.....	127.2	138.8		109	129	135.6
1873.....	122.0	137.5		111	134	138.3
1874.....	119.4	133.0		102	131	136.2
1875.....	113.4	127.6		96	126	129.8
1876.....	104.8	118.2		95	123	128.3
1877.....	104.4	110.9		94	123	127.7
1878.....	99.9	101.3		87	116	120.6
1879.....	96.6	96.6		83	101	117.1
1880.....	106.9			88	117	121.9
1881.....	105.7			85	108	121.1
1882.....	108.5			84	111	122.1
1883.....	106.0			82	106	122.2
1884.....	99.4			76	101	114.2
1885.....	93.0			72	95	108.7
1886.....	91.9			69	92	104.0
1887.....	92.6			68	94	102.0
1888.....	94.2			70	102	102.0
1889.....	94.2			72	99	106.1
1890.....	92.3		112.9	72	102	108.1
1891.....	92.2		111.7	72	101	109.2
1892.....	87.6		106.1	68	97	
1893.....	87.2		105.6	68	96	
1894.....	79.3		96.1	63	95	
1895.....	77.2		93.6	62	87	
1896.....	74.6		90.4	61	91	Conrad
1897.....	74.0		89.7	62	89	(Base 1871–1880)
1898.....	77.1		93.4	64	86	74.9
1899.....	83.9		101.7	68	87	77.2
1900.....	91.2		110.5	75	97	75.8
1901.....	88.5		108.5	70	97	73.0
1902.....	93.2		112.9	69	89	73.7
1903.....	93.7		113.6	69	91	70.2
1904.....	93.3		113.0	70	100	68.3
1905.....			115.9	72	97	70.1
1906.....			122.5	77	106	70.3
1907.....			129.5	80	114	75.2
1908.....			122.8	73	105	74.9
1909.....			126.5	74	100	83.2
1910.....			131.6	78	109	76.5
1911.....			129.3	80	114	74.7
1912.....			133.6	85	117	77.2
1913.....			135.2	85	117	78.9

is continued by the Department of Labor at Washington, but with some modifications. The average of prices from 1890 to 1899 forms the new basis, and the prices of 259 commodities are used. This index number is continued in a bulletin of the department which appears in March or April of each year.

41. *Foreign index numbers.*—The index numbers given in the last three columns of the table are reproduced from the most important foreign investigations. The Sauerbeck and *Economist* tables are English, the Soetbeer and Conrad tables are German. The Sauerbeck number is published in the *Journal of the Royal Statistical Society.* His indexes are computed by a simple unweighted arithmetical average. He has endeavored to arrange a limited number of commodities, all of which represent raw products, in classes in such a way as to be equivalent to weighting.

The *Economist* tables have the distinction of being the first to be compiled. Originally only twenty-two articles were employed in this table and the quotations were those of a given date, either the first of January or the first of July on the averages for the year. The commodities were chosen disproportionately, there being, out of the twenty-two, four in which cotton was the principal element. The base has been changed and more commodities have been added so that cotton no longer has undue influence.

The German table of Soetbeer was frequently referred to in the silver controversy in this country in 1896. The number of commodities was over three hundred and the result represents a simple unweighted arithmetical average.

Conrad uses 157 commodities. The number is pub-

lished in the *Jahrbücher für Nationalœkonomie und Statistik.*

42. *Effects of changes in the price level.*—Changes in the index number show directly variations in the general price level; changes in its reciprocal show variations in the value of money. One point must ever be kept clearly in mind—a rise in the general level of prices does not mean that the price of every particular commodity rises. Some prices may actually fall while the more important ones are rising. Wages and salaries change more slowly than average prices for goods. During a period of rising prices the laboring man's wage, therefore, has a lower purchasing power. During a period of falling prices, on the other hand, he would be at an advantage if he did not lose his job. Moreover, wages in one industry may rise while those in another stand still.

Under the magic influence of a rising price level the pulse of commerce beats faster, the rate of interest rises, and the business world assumes an air of prosperity. Some of these effects will be studied later in connection with the interest rate.

CHAPTER IV

FUNCTIONS OF A BANK

43. *Original meaning of the term.*—Our word "bank" is derived from the German *bank,* meaning a heap or mound. In its early English usage, the term was applied to a heap or pile, as a bank of earth. In colonial times it was used to designate any batch of paper money. A "new Massachusetts bank" meant a new issue of paper by that colony. The early banks of the American republic were generally thought of as mills for the turning out of bank notes. When the phrase "banking privilege" was used it was understood to mean the right to issue notes. Some people still have the idea that a bank is a place where paper money is made—a place where a man can go to secure money whenever he needs it.

44. *Simplicity of banking operations.*—The operations of banking, as they are carried on in modern times, present at first sight an appearance of mystery. Many business men fail to utilize the banking resources of their community to the best advantage because they do not appreciate the true relation which banking bears to business. As a matter of fact, the fundamental work of a bank is extremely simple. The need for a bank arises early in the development of all commercial communities. As business grows, men begin to look around for a safe and convenient place in which to deposit surplus funds against the time when they will be needed. Promising fields of enterprise open before the eyes of intelligent

and wide-awake men. Capital is needed for the development of these new industries. A bank can take the funds which have been paid in by its stockholders and deposited by provident people and turn them over to the enterprising men of the community for productive uses. Some agency for lending and some place of deposit are needed as soon as business begins to develop in a regular way.

These functions are simple. They require honesty, intelligence, and foresight, which are necessary for the successful operation of any commercial enterprise. The banker who receives or pays out deposits must keep an accurate record of these transactions. When about to extend credit to a customer, he must first make sure that the loan will be repaid; he must see that the transaction is properly carried out and recorded in the regular way. Questions of banking policy—how much and to whom to lend, and upon what terms, what reserve to carry—these require all the knowledge and experience which a banker can summon to his aid; but the essence of the transactions themselves is simple.

45. *Banking in early times.*—We ordinarily think of banking as a business peculiarly adapted to the corporate form of organization, and requiring a special amount of governmental supervision. This has not always been the case. We can do no better than quote Dunbar's "Theory and History of Banking" in this connection:[1]

> As a natural consequence of the simplicity of the operations involved in lending and in receiving deposits, it is probable that they have been undertaken and carried on in every old country by individuals long in advance of any public establishments, and

[1] C. F. Dunbar, "Theory and History of Banking," pp. 3, 4.

long before the chroniclers of history thought it worth while to notice phenomena of such a humble order. Private lenders established banking in Venice two centuries before the Senate opened its first public bank of deposit. Banking was in like manner practised by individuals in Amsterdam long before a special class of evils led the city to establish the famous Bank of Amsterdam. And banking of a well-defined modern type was introduced by the London goldsmiths at least a generation before the opening of the Bank of England. Instances of the same sort could easily be multiplied, tending to show that in other countries also banking has had its origin in the effort of individuals to supply certain rather primitive wants of an advancing community, and that the process of satisfaction was by means of a few thoroughly simple operations. Such as these leading operations were two or three centuries ago, they have continued to be in the midst of the changes and the enormous development of the present century.

In America, banking was at first considered a common-law right. No special charter was needed to begin the banking business any more than one is needed now to enter the grocery business. At one time, notes were issued and a regular banking business carried on by merchants, bridge and turn-pike companies, or by anyone who chose. The peculiar public nature of banking was soon recognized, however, and numerous restrictions were thrown about banking operations at an early date. Indeed, public feeling swung far in the opposite direction and banks were unnecessarily restricted in some instances. Many of the early chartered banks were required to perform certain services for the government. Some were required to make loans to the state, some to carry on certain fiscal operations for the government, some to perform various other public services which are not necessarily connected with the real business of a bank.

The making of loans and the issuing of notes formed the chief business of the early banks. Any considerable deposit and check business did not develop for some time. Indeed, country banks have not yet developed this field as fully as they might.

46. *Primary functions of a bank.*—A bank may be defined, in general terms, as an institution for the receiving of deposits and the making of loans or discounts. With these two functions may be combined a third, that of issuing bank notes, or the bank's own promises to pay, for use in general circulation as money. Note issue is not an indispensable function of banking; but it is so important that it deserves treatment along with the functions of deposit and lending.

It is sometimes said that banking consists in receiving money from depositors and lending it to borrowers. A bank lends much more than the money which it receives from depositors. Again, it is sometimes said that a bank is a manufacturer of credit. This statement is likely to be misleading. Banks are dealers in credit. They get their credit just as a merchant does, by acquiring a reputation for always paying their debts when they become due. No bank has a machine in its basement grinding out credit in car-load lots. Every bank is busy acquiring credit, not manufacturing it.

Bank credit, like the credit of an individual, is based on confidence. What is there to justify confidence in a particular bank? First, there is the reputation for integrity, which is always the first requisite. Secondly, there is the ability of the bank to pay its debts at maturity. The ability to pay is based on the money which stockholders pay into the bank and money which customers deposit, on money which the bank earns and retains in the business as surplus, and on the debts due

the bank. These debts are evidenced by promissory notes, bonds and other forms of credit instruments which the bank holds. A bank may also hold stocks or other evidences of ownership in outside business enterprises; but banks are not ordinarily permitted to deal in stocks.

Evidently a bank's credit, like the credit of an individual, is also rooted in general business conditions. In hard times the debts due a bank may become worthless. As these form the bulk of a bank's assets, a fall in their value is a serious matter.

Finally, we place such legal restrictions about the organization and operation of banking that a presumption is created in favor of the soundness of bank credit. In spite of these legal restrictions a bank will have poor credit if it is not conducted properly.

The real business of the bank is to trade its well-known credit for the cash of its customers or for their less widely known credit. The credit which the bank gives may be in the form of bank notes, or in the form of a certificate of deposit, or a "pass book." The pass book is simply an acknowledgment on the part of the bank, that the customer has a right to call on it for money up to a certain amount. The customer withdraws his money by writing checks on the bank. In return for this credit, the bank gets cash or the credit instrument of its customer. Where the transaction is merely an exchange of credits, the bank can evidently make a charge, as its credit is most in demand. Moreover, the credit which the bank gives can usually be "cashed" on demand, while that which it gets is payable at some future date. This, of course, makes the bank's credit worth more. The charge which a bank makes may take the form of interest or discount, as the case may be. and will be discussed later.

47. *Secondary functions.*—In addition to the three principal functions of discount, deposit and issue, banks perform various other services for the community. Bankers often advise business men on questions of financing. This is an important service. A growing business needs more capital. Shall it be secured through an issue of bonds, or how? If so, what kind of bonds? Or, would it be better to issue short-term notes? Or, would it be better to issue additional stock? How can the capital be obtained most advantageously? Under present conditions, is it advisable to extend the business to any great extent? The banker, with his knowledge of the money market and of general conditions, should be in a position to render valuable advice on such points as these. Business men in this country are not as quick to take advantage of this service as they might be. In Canada, the tie between business men and bankers is much stronger.

Banks also commonly act as trustees, executors, and administrators. They furnish safe deposit vaults for customers; sell letters of credit to travelers; transmit funds to distant points; aid in the promotion of new enterprises; and render many services to the community. Some of these secondary functions are parasitical and some may even be carried so far as to endanger the very existence of the bank.

48. *Banks of issue.*—Banks are divided into several classes, according to the particular functions upon which they place most emphasis. Banks of issue form one of these classes. For many years there has been an agitation in the United States for a "central bank of issue." Chief emphasis is here laid on the function of issue. Such a bank would not carry on a deposit and lending business with individuals; these operations would be con-

fined to business with the government and with the banks. The early banks in this country were primarily banks of issue. The best example of this kind of bank is the department of issue of the Bank of England. The department of issue is distinct from the banking department. Its business is to issue notes of the Bank of England. No lending is done; and no deposit business in the ordinary sense of the word. The department does accept deposits of gold, for which it pays out bank notes. In the same way, our federal treasury department receives gold and pays out gold certificates. No one would call this a deposit business. Most banks of issue carry on some kind of deposit business in connection with the function of issuing notes. Unless an institution both accepts deposits and makes loans, it cannot properly be called a bank in the modern sense of the term.

49. *Banks of discount.*—A bank of discount is one which is primarily engaged in lending operations, and also accepts deposits. Banks of discount are of two kinds: Commercial banks and financial banks, depending on the kind of loans which they make. In general, it may be said that commercial loans are based on actual commercial transactions already in process or completed, such as the purchase and sale of goods; while financial loans are based on transactions not yet begun, such as the promotion of new enterprises. The two kinds of loans are radically different and will be discussed further in the chapter on loans and discounts.

50. *Savings banks.*—A savings bank is a banking institution, organized for the purpose of gathering together the small savings of the community in which it is located and investing them in such interest-bearing obligations as are prescribed by law; the interest so

earned to be divided among the depositors, after paying expenses, providing for amortization of premiums on bonds and reserving reasonable amounts for accumulation of a surplus. Some savings banks have no capital, the depositors being the owners of all assets of the association.

51. *Trust companies.*—The usual functions of a trust company, according to Kirkbride and Sterrett, are:

> Banking in a more or less limited form, execution of corporate trusts, execution of individual trusts, care of securities and valuables. In addition, other functions are sometimes exercised, such as life, title and fidelity insurance, and the business of becoming surety. The earlier companies in the United States were chartered to manage individual estates only, and to act in certain fiduciary capacities; the recent development of the trust company has been in the direction of banking functions and corporate trust business.

Banking and trust business are combined under one corporation in some states, and in others the trust companies have encroached upon the legitimate field of the bank of discount by bidding strongly for demand deposits and investing a large percentage of their funds in bills receivable under the guise of bills purchased.

Said a speaker at the convention of the American Bankers' Association at Milwaukee in 1901:

> One of the most conspicuous functions of our trust companies, apart from such as are technically fiduciary, is to gather together, whether through interest-bearing accounts, certificates of deposit, debentures, or otherwise, the long-time funds of the community, and those which are not regularly needed in the quick turn-over of daily commerce, and to lend them, on the pledge of securities, on mortgage, or in some equally safe man-

ner, to those who require cash for legitimate speculation, or who, in construction or development, or with a view to family settlements, must expend an amount of money which cannot be prudently withdrawn from business operations or obtained, without inconvenience or disadvantage, from the outright sale of real property or of special investments.

A combination of the legitimate operations of commercial and savings banks, together with other kinds of business not allowed to either, constitutes a trust company business. The trust company should enter into the field of the commercial banks only as far as is necessary to transact its business. The further it is removed from the commercial bank, the more dignified will be its trust business. Ultimately it is likely to be more profitable.

52. *Safe deposit companies.*—The New York State law defines a safe deposit company as follows:

> . . . a domestic corporation formed for the purpose of taking and receiving as bailee for safekeeping and storage, jewelry, plate, money, specie, bullion, stocks, bonds, securities and valuable papers of any kind, and other valuable personal property, on deposit, and guaranteeing their safety upon such terms and for such compensation as may be agreed upon by the company and the respective bailors thereof, and to rent vaults and safes and other receptacles for the purpose of safekeeping and storage.

A safe deposit company is a valuable adjunct to the business of a trust company and if properly located and managed may be made a valuable advertisement. Very frequently, the vaults of the trust company are rented from the safe deposit company. Many banks in small cities and towns are beginning to realize the benefit that

may be derived from leasing vault space and, when erecting new buildings or remodeling, are building much larger vaults than their present needs require and equipping a portion of the vault space with boxes to be leased to their customers and others. Some banks net as much as 15 per cent on vault investments without any annoyance to their own business.

53. *Building and loan associations.*—Several kinds of building and loan associations are defined in the New York State banking law as follows:

> The term, "building and lot association," . . . means any association or corporation organized for the purpose of accumulating a fund for the purchase of real property, to pay off encumbrances thereon, to aid its members in acquiring a building lot or lots, and making improvements thereon . . .
>
> The term, "savings and loan association," . . . means a corporation formed for the purpose of encouraging industry, frugality, home-building and the saving of money by its members, the accumulation of savings, the loaning of such accumulations to its members, and the repayment of such accumulations . . .

The best building and loan associations are those which loan their money to local borrowers.

54. *Mortgage, loan and investment corporations.*—The New York State law defines this class of financial corporation as follows:

> The term, "mortgage, loan or investment corporation," . . . means any corporation other than an insurance corporation formed . . . for the purpose of selling, offering for sale or negotiating bonds or notes secured by deed of trust or mortgages on real property or choses in action, owned, issued, negotiated or guaranteed by it, or for the purpose of receiving any money

or property, either from its own members or from other persons, and entering into any contract, engagement or undertaking with them for the withdrawal of such money or property at any time with any increase thereof, or for the payment to them or to any person of any sum of money at any time, either fixed or uncertain.

55. *Source of authority.*—Certain functions of banking are no longer regarded as common law rights. Before a bank can enjoy certain privileges, it must receive authority from the state or federal government. In most of the older states it was, at one time, necessary for banks to obtain a special charter from the legislature before opening business. As every new bank charter had to run the gauntlet of legislative action, it was quite possible to set political influences at work either for or against a proposed charter, to the detriment of sound banking.

Finally, the states passed general banking laws. The law now states certain conditions which must be complied with before a new charter is granted. Any group of men who will comply with these general provisions, which apply to all alike, is entitled to engage in the business of banking. This plan is evidently much better. In addition to taking the banks out of politics, it provides for a uniform system of banks throughout a particular state. Some of the operations of banking may still be carried on without a special grant of authority from the state, some states being more strict than others.

56. *Individual and private bankers.*—An individual or private banker is one who receives the funds of individuals or corporations and invests them for their account. Private bankers usually underwrite or purchase

outright new issues of bonds or stock and dispose of them to their clients. They frequently allow the owners of money deposited with them to draw against the funds on deposit. This is never a very important part of their business, the money entrusted to their care usually being left for investment.

There is a distinction between an individual banker and a private banker which has been clearly established by the courts. "An 'individual' banker is one who has received authority from the banking department to engage in business subject to its inspection and supervision, and a 'private' banker is one engaged in banking without having secured any special privileges or authority from the state." [1] This distinction is generally made.

Private banking is peculiarly subject to abuse. Poor people may be induced to deposit their small savings with a private banker who, through carelessness or dishonesty, may squander the funds in the absence of any state inspection or regulation. The New York law provides that, with certain exceptions:

> . . . no individual or partnership shall (receive) deposits of money for safekeeping or for the purpose of transmission to another or for another in (certain) cities . . . without having first obtained . . . a license to engage in such business.

The exceptions are: (1) incorporated banks; (2) hotel-keepers receiving money for safekeeping from guests; (3) ordinary express business; and (4) any business where the average sum received for deposit or transmission is not less than five hundred dollars.

All licensed institutions of this kind are subject to examination by the state comptroller.

[1] See Hall v. Baker, 66 App. Div., N. Y., 131.

CHAPTER V

THE BANK STATEMENT

57. *Purpose of a bank statement.*—It is a peculiarity of the banking business that it may have a complete report of its condition at the end of each day. A bank statement is made for the purpose of showing the condition of a bank at a given time. It may be voluntary or compulsory. National banks are required by law to make a report to the Comptroller of the Currency at least five times a year. A national bank never knows when it will be called upon for a report. State banks must make reports to their respective state banking departments. In the old state banking systems, reports were required on certain days fixed in advance. Just before the date for reporting, banks were accustomed to arrange their business so as to make a favorable showing for the time being. This process, which is called "window dressing," was quite commonly practiced by banks throughout the country in the early days of banking.

The Comptroller of the Currency combines the statements of national banks into a composite statement, which shows the condition of the national banking system as a whole. This combined statement is significant and is closely watched by bankers and business men all over the country.

58. *A bank statement.*—There is given in section 59 a statement which may be supposed to represent the condition of a national bank in Boston, Massachusetts,

in the early months of 1914. It will be observed that the liabilities are divided into two classes: Liability to creditors and liability to shareholders. The former are debts of a going concern; the latter, with the exception of dividends which have been declared but not paid, are not. Stockholders cannot call for a share of the stock or surplus at any time.

National banks are required by law to carry at least one-tenth of their net earnings to a surplus fund, until that fund amounts to twenty per cent of the capital. The directors may vote to carry still more of the net earnings into surplus if they so desire and may declare dividends out of any part of the surplus over and above the required twenty per cent. In practice, amounts carried to surplus are left in that fund permanently unless it is desired to increase the capital stock by declaring an extra dividend offering new shares to the stockholders, at the same time.

In case a bank is liquidated, the stockholders receive their share of all the assets that are left after the bank's creditors have been paid. Capital, surplus and undivided profits are sometimes called liabilities in liquidation. They indicate the shareholders' interest in the business.

59. *Changes in bank balance sheet.*—The fact that the resources and liabilities of a bank are equal has no bearing whatever on its solvency. The last statement given out before a bank fails invariably shows the resources to be equal to the liabilities. The discrepancy may be looked for in some of the items; either the resources have been entered at a valuation above their real worth, or some item of liability has been omitted or reduced. It is almost always discovered, in the event of a failure, that loans and discounts contain items which

Resources

1.	Loans and discounts	$29,045,607.23
2.	Overdrafts, secured and unsecured	3,496.76
3.	U. S. bonds to secure circulation (par value)	1,600,000.00
4.	U. S. bonds to secure U. S. deposits (par value)	1,000.00
5.	Premiums on U. S. bonds	4,002.50
6.	Bonds, securities, etc.	2,641,980.67
7.	Banking house, furniture and fixtures	1,300,000.00
8.	Other real estate owned	12,500.00
9.	Due from approved reserve agents	5,574,539.00
10.	Due from national banks (not reserve agents)	2,128,525.47
11.	Due from state banks and bankers and trust companies	671,602.60
12.	Checks and other cash items	44,369.37
13.	Exchanges for clearing house	1,953,468.72
14.	Notes of other national banks	73,800.00
15.	Lawful money reserve in bank, viz.:	
	Specie $3,494,141.02	
	Legal-tender notes 1,080,398.00	
		4,574,539.02
16.	Five per cent redemption fund	80,000.00
17.	Due from U. S. Treasurer	185,996.40
	Total	$19,895,427.74

Liabilities

	To Creditors:	
18.	Individual deposits	$36,134,110.86
19.	Due to reserve agents	875,762.37
20.	Due to other national banks	2,253,186.11
21.	Due to state banks and bankers	475,388.17
22.	Due to trust companies and savings banks	386,350.10
23.	Demand certificates of deposit	147,804.53
24.	Certified checks	272,413.72
25.	Cashier's checks outstanding	270,931.42
26.	National bank notes outstanding	1,583,600.00
27.	U. S. deposits	1,000.00
28.	Reserve for taxes	111,193.94
	To Shareholders:	
29.	Capital stock paid in	4,000,000.00
30.	Surplus funds	3,000,000.00
31.	Undivided profits, less expenses and taxes paid	382,074.52
32.	Dividends unpaid	1,612.00
	Total	$49,895,427.74

are worth far less than the figures indicate. Under resources are entered all the items of property owned by the bank and all funds due to be paid to it in the future. Under liabilities are placed all the debts owing by the bank, and all items representing the equity of the stockholders in the property of the bank.

The items on the resources side may increase or diminish without any transaction taking place and, therefore,

without any changes having been made on the liability side. Some of the loans may prove to be bad and uncollectible, or some of the real estate or bonds may increase in market value; profits may be made, or losses may be incurred. It is impossible constantly to adjust all values given in a statement to correspond with actual market conditions. In some banks the adjustment is made periodically; in others, only when it is discovered that the alteration of value is permanent; and in still others, it is never made.

60. *Concealed assets.*—It frequently happens that where the items of property have enhanced in value, the figures on the statement are allowed to remain absurdly low, creating what are called "concealed assets." It is considered by a great many bankers an evidence of conservatism to continue to list at a low figure, property worth much more than its book value. There can be no objection to this practice so long as everybody understands the real conditions and knows that the statement is a fictitious one. The objection to the practice arises from the fact that the stockholders do not realize the full value of their stock and may be induced to part with it at a price which they would not consider at all, if they knew the equity represented by it.

61. *Items in resources.*—We will now take up each item separately with such explanations as are necessary to indicate the transactions by which it is created. (1) "Loans and discounts" consist chiefly of promissory notes and bills of exchange against which the bank has made advances to borrowers. The figure includes bills discounted, and time and demand loans. Some loans are secured by deposit with the bank of collateral of one kind or another; others are unsecured.

(2) "Overdrafts" appear in nearly all bank state-

ments. According to strict business principles they should not be there at all, but it sometimes happens that a depositor overdraws his balance by mistake. In such a case the bank's officers pay the check if they consider the man's character and resources to be good. Until the overdraft is made good or proved uncollectible, it is properly reckoned as an unpaid debt among the bank's resources.

In some localities loans are made by giving the depositor the right to overdraw his account up to a certain amount, the overdraft being secured by a deposit of collateral with the bank. Interest is charged on the amount overdrawn. This practice, however, is very little used in this country. The borrower makes a loan and takes credit at once for the full amount needed.

(3) "United States bonds to secure circulation" will be discussed in the chapter on the national banking system. This item represents bonds owned by the bank, but deposited at Washington as security for circulating notes. The bonds are shown on the statement at par value. It may be noted that the $1,600,000 of bonds are nearly offset by the outstanding circulation of $1,583,600.

(4) The National Banking Act provides that the funds of the United States may be deposited in national banks if United States bonds, or other collateral approved by the Secretary of the Treasury, are deposited at Washington as security for the deposits. The Secretary of the Treasury has accepted collateral other than United States bonds. The Federal Reserve Act provides that government funds may be deposited either with the federal reserve banks or with members of the federal reserve system. The item represents the par value of these United States bonds.

(5) The item, "premiums on United States bonds," represents the difference between the par value and the cost of the United States bonds owned by the bank. In this case the purchase appears to have been made at 100¼.

(6) The item, "bonds, securities, etc.," embraces bonds, stocks, chattel mortgages, judgments, claims and other similar securities. The securities which are deposited by borrowers as collateral for loans do not appear in the statement, because they do not become the property of the bank until default has been made on the note. Under the law, national banks are not permitted to own corporation stocks unless it is necessary to take them in connection with a debt, except that the Federal Reserve Act does permit and require national banks to own stock in their respective federal reserve banks. This item, therefore, represents practically the bonds owned by the bank. It has increased greatly within the past few years, because under normal conditions there is a ready market for bonds, and the banks regard them as a form of secondary reserve which almost immediately can be converted into money in case of emergency. Then, too, many banks are dealers in bonds and hold them pending their sale to customers.

(7) "Banking house, furniture and fixtures" are proper assets of a bank. A bank must either own its house or pay rent. When building a banking office, extra floors are added and rented to tenants. This frequently gives a bank its quarters at a very low rent. The investment may show a profit even after allowing for all expenses. Some of these large office buildings have been erected by separate companies, composed of the same stockholders as the bank. The bank pays a rent to the separate company.

(8) Commercial banks do not usually lend money on the security of real estate. National banks were not permitted to do so under the National Banking Act, but they could take such property for unpaid loans previously made in good faith.[1]

The Federal Reserve Act does make a provision which allows national banks to lend a limited amount on improved and unencumbered farm lands. This will be discussed in a later chapter.

(9) National banks in the city of Boston are permitted to deposit a part of their reserves in banks in the cities of New York, Chicago and St. Louis. The Federal Reserve Act requires that these deposits gradually be reduced and finally eliminated.

(10-11) One of the principal duties that a depositor expects a bank to perform is to collect the checks that he deposits, payable at other banks. Some of these checks are payable in other cities. The bank makes arrangements with banks in various parts of the country to collect these items. The depositor is credited with the total amount of his deposit, which includes these items, and the accounts of the banks to which they are sent are debited. Transfers are made from these accounts to reserve agents, in various ways. The balance is shown in items 9, 10 and 11 of the statement under consideration.

(12) "Checks and other cash items" include checks and drafts on banks in the city which are not members of the clearing house and do not clear through it. This item also includes a few small advances such as salaries paid in advance, carfare, telegraph charges and other petty cash payments to be charged to expense in one amount.

[1] See Chapter XIV.

(13) "Exchanges for the clearing house" are checks, drafts and other claims which are to be presented through the clearing house on the day following.

(14) A national bank is not allowed to count the notes of other national banks as part of its lawful reserve. It is, therefore, to its interest to have as few of them on hand as possible. Consequently, they are paid out before any other form of currency, except the bank's own notes which, of course, it is anxious to keep out. A bank sends the notes of other banks to Washington for redemption.

(15) "Lawful money reserve" includes all kinds of money on hand which may be counted as a part of the reserve. Specie includes gold and silver certificates, as well as coins, because they represent actual coin deposited to pay the certificates when presented. Legal tender notes include greenbacks and Treasury notes of 1890. The latter are now scarce.

(16) Every national bank is required to keep on deposit with the Treasury of the United States a fund equal to five per cent of its outstanding circulation. Before the passage of the Federal Reserve Act this deposit could be counted as part of the lawful reserve; now, the deposit must be maintained but it may not be counted as part of the reserve. Since the total reserves have been lowered materially, this requirement works no hardship on the banks.

(17) The item, "due from the United States Treasury," includes any amounts due from the treasury other than the five per cent fund. Money is constantly passing between the bank and the treasury. Subsidiary coins and bank notes are sent in for redemption; money is sent for exchange into subsidiary silver; bonds are sent in for redemption and other transactions are carried on.

62. *Items in liabilities.*—(18) "Individual deposits" represent the amount due to individuals and corporations. Most of this amount is payable on demand; some deposits are left with the banks for stated periods.

(19) The reserve agents of the Boston bank send items to it for collection. Credit is given to the remitting bank immediately on receipt. These credits must be shown separately on the Boston bank's statement, because it may count only the net amount due from reserve agents as a part of its reserve.

(20) National banks are required to report amounts due to national banks which are not their reserve depositories, separately from reserve agents. These deposits due represent collections not yet remitted or drawn out by draft.

(21-22) State financial institutions deposit funds with national banks for exchange purposes and also sums which they are permitted by the state banking laws to count as a part of their required reserves.

(23) "Certificates of deposit" are a specialized form of deposit not subject to check. They are used for remittances, or for payments by travelers within the territory in which the bank is known. They are particularly convenient for making remittances to localities on which drafts are not obtainable.

(24) A certified check is an ordinary check drawn by a depositor, which has been certified by the cashier or other appropriate officer and which has not yet been presented for payment. When the bank certifies a check, the amount is taken from the account of the depositor, and placed in the certified check account. By this act, it becomes a direct obligation of the bank, the same as a promissory note. If the bank should fail before it is presented for payment, the holder would have no re-

course upon the original drawer of the check. The holder, by having it certified instead of demanding payment at the bank, throws the risk of non-payment upon himself. If the maker of the check himself has it certified, his liability for payment is the same as in the case of an ordinary check.

(25). "Cashier's checks" are checks drawn by the cashier upon his own bank in payment of expenses or other matters.

(26) "National bank notes" are those issued by the Government for the account of the banks against a deposit of United States bonds. The details will be discussed in a later chapter.

(27) "United States deposits" have been discussed sufficiently for the present under item four.

(28) Each national bank is required to pay a federal tax on its average outstanding circulation equal in amount to one-fourth of 1 per cent each half year on such notes as are secured by the deposit of United States bonds bearing interest at 2 per cent per annum. The tax is one-half of 1 per cent each half year on notes which are secured by bonds bearing a higher rate of interest. National banks are also subject to certain other taxes. These taxes are often provided for by monthly accruals.

(29) The capital stock of the bank represents the funds paid in by the stockholders. No national bank can begin to do business until fifty per cent of the capital has been paid in cash, and the balance must be paid in instalments of at least ten per cent per month.[1]

Sec. 5139. The capital stock of each association shall be divided into shares of $100 each, and be deemed personal property and transferable on the books of the association in

[1] See Chapter XIV.

such manner as may be prescribed in the by-laws or articles of association. Every person becoming a shareholder by such transfer shall, in proportion to his shares, succeed to all the rights and liabilities of the prior holder of such shares. . . . [1]

(30) The item, "surplus fund," signifies that a certain portion of the resources in addition to the capital paid in belongs to stockholders. The surplus is created either by cash paid in at the organization of the bank in addition to the capital paid, for which no stock is issued, or it represents profits which have accumulated and which have not been paid out in dividends.

The idea of the surplus fund is to provide an item in the liabilities which can be used to represent changes in the equity of stockholders in the reserves without altering the capital stock. If the bank should suffer a loss of resources in any manner beyond the amount of undivided profits, the capital of the bank would be impaired if it were not for the surplus.

A liberal surplus enhances the credit of the bank and for that reason new banks frequently start with a surplus of fifty or 100 per cent of the capital subscribed. This has proved an advantage in several ways. National banks were required to invest a part of their capital in United States bonds, and if the capital were made small the banks were required to purchase fewer bonds than would have been required if the whole investment had been put into capital. In states where the shares of the bank are taxed on their par value it reduces the personal property tax of the holders thereof.

The fact that the shares of stock represent the equity of the holders not only in the capital but also in the surplus renders the par value of bank stock of less importance than the "book value." The book value of the

[1] National Banking Act.

bank stock represents the $100 par value plus the proportionate share of the surplus.

The whole purpose of requiring a certain capital sum to be contributed by the shareholders can be defeated by the subsequent withdrawal of its funds as loans to shareholders. It frequently happened in the early history of this country that banks were started with capital borrowed by the incorporators, which borrowings were repaid just as soon as the bank was in position to make loans to the shareholders. The shareholders would give their personal note to the bank for the amount of their loan and deposit their shares of stock in the bank as collateral security. Such notes were called "stock notes." With the money borrowed from the bank the shareholder would repay the original loan. After the bank was organized he would have to keep up the interest on his new loan, but the profits on his stock more than paid this. No bank can now lend on the security of its own stock so this condition no longer prevails.

The profit and loss account is credited with all earnings when the books are closed, usually twice a year. Some banks close their books monthly, others carry accrued earnings and expenses to profit and loss monthly. From the gross profits must be deducted all the expenses of doing the business. At the end of the fiscal year the directors meet and declare dividends from this item and transfer a part of it to surplus.

(32) "Dividends unpaid" usually constitute a small item on a bank statement. Dividends are generally paid the same day they are declared; but it sometimes happens that shares of stock have changed hands or have been involved in litigation, or that the owners cannot be found immediately. In such cases, the money remains in the bank, awaiting the rightful claimants.

63. *Double liability of stockholders.*—The shares of stock in a bank differ from stock in other corporations in the double liability feature. The principle of limited liability is an almost universal feature of corporation laws in this country and the stockholders cannot be made liable for further payments for the stock if it has been fully paid. The idea of limited liability is of course to make it possible for persons who are unwilling to take unlimited risk in becoming partners in an enterprise to become stockholders with a maximum risk of losing only what they have paid in or subscribed. In the case of banks, however, it has become a fixed custom, not only in the federal banking law, but also in most of the state statutes, to place a double liability on the shareholders for the better protection of depositors; the reason being that the depositors are creditors of an entirely different sort from the creditors of other corporations. Some states prescribe double liability for corporations other than banks.

Sec. 5151. The shareholders of every national banking association shall be held individually responsible equally and ratably, and not for one another, for all contracts, debts, and engagements of such association to the extent of the amount of the stock therein, at the par value thereof, in addition to the amount invested in such shares; except that shareholders of any banking association now existing under state laws having not less than $5,000,000 of capital actually paid in and a surplus of twenty per centum on hand, both to be determined by the Comptroller of the Currency, shall be liable only to the amount invested in their shares; and such surplus of twenty per centum shall be kept undiminished, and be in addition to the surplus provided for in this title; and if at any time there is a deficiency in such surplus of twenty per centum such association shall not pay any dividends to its shareholders until the deficiency is made good; and in case of such deficiency, the Comp-

troller of the Currency may compel the association to close its business and wind up its affairs under the provisions of chapter four of this title.[1]

64. *Interpretation of a bank statement.*—Does the statement show that the bank is in sound condition? The most significant thing to be noted is the relation of reserves to deposits. A calculation of this ratio shows that the bank holds lawful money reserves equal to about twenty-six and one-third per cent of its liabilities against which reserves are figured. When this report was rendered national banks in Boston as well as other reserve cities were required to maintain twenty-five per cent reserves, one-half of which might be on deposit with reserve agents. The bank had a safe margin above the requirement at the time of this report.

So far as we can tell from reading the statement the bank is sound. The capital and surplus are ample for the volume of business done. Real estate does not form too large an item. In fact, we might look for concealed assets right here. All the items appear to bear a reasonable proportion to each other. This is as much information as we can get from a mere statement.

65. *Bank statement not an infallible indication.*—One point must be clearly understood, namely, that, while a statement will sometimes indicate weakness in a bank's condition, it can never be taken as absolute proof of the soundness of the institution. In the first place, the statement may be a deliberate misrepresentation of the facts. Even if the statement is true, we must get back of it and into the operations of the bank before we can be sure of the bank's condition. For example, suppose that half the individual deposits belong to one large depositor and that he should suddenly check them

[1] National Banking Act.

out. This operation alone would more than wipe out the entire reserves of the bank and it would have to close its doors, unless it could quickly dispose of some of its assets for lawful money. In panicky times the best of assets cannot be converted into lawful money without serious loss. Now, suppose a large loan has been made to one man who, for some reason, becomes unable to pay. Evidently, many contingencies may arise and not be revealed in the statement, which will force the bank into an unsafe position.

66. *Bank examinations.*—The Federal Reserve Act requires the Comptroller of the Currency to make sure that each member of the federal reserve system is examined at least twice in each calendar year. State banks are examined by the banking departments of their respective states. In addition, clearing house associations often provide for examinations of member banks.

A bank should never know when it is to be examined. Otherwise, it might "dress its windows" for the occasion. In the early days, bags of specie often made the rounds of the banks along with the state examiner. The very stage that carried an examiner to the next bank might also carry a messenger with a grip full of money which would be placed in the bank's vaults a few minutes before the arrival of the examiner only to be taken out again as soon as the examination was finished and carried to the next bank in line.

Bank examiner's reports are for the most part confidential. It is sufficient for the banking department to certify to the public that, in its judgment, the bank is sound. Evidently, individual transactions should not be made public. Strict laws are passed to prevent dishonesty and indiscretion on the part of examiners.

CHAPTER VI

BANK NOTES

67. *Definition.*—A bank note is the promise of a bank to pay money to the bearer on demand. At one time it was the custom of banks in the United States to issue notes payable at some fixed time in the future. Such notes are called "post notes" and at the time there was a reason for their issue. Payments to distant parts of the country had to be sent by way of the slow-moving mails of the day and robberies were not infrequent. Notes payable only at a given time and at a given place were not so tempting a spoil for the highwayman.

The Bank of England makes a small issue of post notes, under the title of "seven-day bills," for the purpose of making remittances through the mails. In this country, however, we would recognize the issue of post notes as an attempt of the bank to borrow on time and would interpret it as an evidence of unsoundness in the bank's condition. Undoubtedly the post note offers peculiar temptations for unsound banking, and its issue by national banks has, therefore, been prohibited.

Bank notes, in the community or country where they are generally acceptable, are a form of credit money. Like all credit money they should not bear interest. Otherwise, their value would vary from time to time as interest-due dates approached. The first notes of the Bank of England bore interest and were inconvenient, as their value had to be figured whenever they changed hands.

Bank notes should be issued in uniform style for round sums, and in such denominations as are convenient in daily transactions. They should be transferable without formality and without recourse on the part of the holder to any previous holder except the issuing bank. Bank notes do not come under the statute of limitations. A note issued a hundred years ago is still a valid claim if the issuing bank is in existence today.

68. *Evolution of the bank note.*—The modern bank note is a product of slow development. Few countries, even today, have a perfectly satisfactory system of bank note issue. Credit instruments bearing some of the characteristics of bank notes were issued by the goldsmiths of London as early as 1670. MacLeod finds that certificates representing deposits of gold and silver were issued in China under the dynasty of Chang as early as 807. All these notes were fully "covered"—i. e., they were backed dollar for dollar with a reserve of standard money. As they were more convenient to handle than the metal, the custom of issuing them grew until the issuers began to print blank forms to be filled in with the names of depositors and the amounts due them. Finally, notes were printed in round sums ready for issue, and these were made payable to bearer or order, according to the wishes of the depositor.

After a while persons and firms of well-known credit began to issue notes which were not entirely covered by a metallic reserve. These notes were more convenient than the ordinary promissory notes of small merchants because they were well known, were issued for even sums, and were payable on demand. As they were paid promptly, they soon came to form an important part

of the circulating medium. Finally, the advantage of having them non-interest bearing was seen and they became even more convenient.

In the beginning anyone could issue these notes and put them into circulation if people were willing to accept them. This was true in the early years of banking in America, and note issue was a common law right in England until the passage of the Bank Act of 1844. In the course of time it was found that unregulated note issue was fraught with danger to society, and it has been found best to hedge the practice about with certain restrictions.

69. *Cash reserve against notes.*—We have just seen that bank notes should be redeemable on demand in gold, or at least in some form of money that can be readily converted into gold. Since 1879 our government credit money has been convertible into gold, but not always without inconvenience to both the bearer and to the government. So long as easy convertibility is assured, there can be no serious objection to making our bank notes redeemable in legal tender credit money as well as in gold. But the utmost care must be taken to maintain this convertibility, and there is always an element of danger. Easy and sure redemption in gold is the first requisite of a good bank note and will remain so as long as gold continues to be the standard medium for settling international debts.

In order to secure this feature of quick redemption it is necessary for a bank to keep at hand a certain amount of gold or convertible credit money. The proportion which the reserve should bear to outstanding circulation depends upon the customs of the people—upon the rapidity with which notes are brought in for redemption. It is found out by experience and may

differ widely in different countries and even in different banks in the same country.

Each bank aims to carry as small a reserve as is consistent with safety, since money stacked away in the vaults earns nothing and requires storage space that is expensive. A good banker, on the other hand, is always anxious to maintain a sufficiently large reserve, as he would otherwise suffer the consequences in the loss of popular confidence and the ruin of his business. Not all bankers, however, are wise enough to carry adequate reserves and governments have often found it necessary to make certain reserve requirements. In such cases the ratio of reserve is usually made the same for all banks of a particular class. This evidently forces some banks to carry a larger reserve than necessary and for that reason is unscientific. The burden is ultimately borne by the business public and not by the banks. For these reasons a legal requirement should not be made unless absolutely necessary.

Our national banks are not required to keep any reserve against notes in their own vaults, but must maintain a 5 per cent fund at Washington. Federal reserve banks are required to keep in their own vaults a reserve of 40 per cent in gold against outstanding circulation. Some foreign countries do not find it necessary to make a legal reserve requirement. Other features of the reserve question, such as the combined reserve, will be discussed in connection with reserve against deposits. In the United States we have had occasion to make more stringent legal requirements concerning reserves against deposits than against note issues.

70. *Security for notes.*—Besides the maintenance of a cash reserve, various other means have been devised for insuring the note holder against loss. So long as a

bank is solvent and in operation, the prime requisite of its notes is that they be currently convertible into standard money on demand. But when a bank comes to wind up its affairs, whether for insolvency or not, note holders are primarily interested in the question of ultimate redemption. It will be evident that some of the following classes of security may be used to insure current redemption as well as ultimate redemption. They are, however, primarily intended for guaranteeing ultimate redemption and must not be relied upon for purposes of current redemption to any great extent. The maintenance of an adequate cash reserve is the only way to insure current redemption.

The establishment of a common guarantee fund, sometimes called "safety fund" or "circulation fund," is one of the means that have been devised to secure circulation. Under this system all the banks contribute a certain amount to a common fund which is used to redeem the notes of any banks that fail. The amount which each bank subscribes should bear a certain ratio to its outstanding circulation. When the fund is drawn upon to pay the notes of a failed bank, it should be built up again by a proportionate contribution from all the remaining banks. It may be objected that this plan places a premium on bad banking by guaranteeing the notes of good and bad banks alike. The objection is valid. The establishment of a safety fund does not give any excuse for lessening the rigor of other methods of providing security. A distinct advantage of the plan is that it causes every banker to watch all the other bankers to see that nothing goes wrong. It undoubtedly gives an added security to the notes. The plan is being successfully carried out in Canada, but, as we shall see later, it is not the principal thing that gives

Canadian bank notes their high standing. It was tried in New York State before the Civil War, and did not work well for a time; but its failure is generally attributed to the fact that the fund was at first used to secure the deposits as well as the notes of failed banks.

Sometimes banks set aside a certain part of their assets as a special security against their notes. Our national banks, for example, are required to keep with the Treasurer of the United States a deposit of United States bonds equal in amount to their outstanding circulation. In case a bank fails, these bonds are sold and the receipts of the sale are applied toward the redemption of its notes. Bonds may be withdrawn by the banks by retiring their circulating notes or by depositing lawful money to an equal amount in the treasury. This feature, along with other methods of securing notes, places the ultimate redemption of national bank notes beyond the shadow of a doubt. No holder of a national bank note has ever lost a cent through the fault of the system. The great defect of the plan is that it limits the amount of notes which a bank can issue to the amount of bonds which it can buy at a price sufficiently low to make the transaction profitable. Moreover, the issue and retirement of notes is attended with too much time-consuming formality. Often the notes cannot be had when they are needed, and, on the other hand, they may not be retired as soon as they have served the purpose for which they were issued. This defect is so serious that it renders the whole scheme undesirable.

In some countries banks are allowed to issue their notes in exchange for good commercial paper. In this case ultimate redemption is secured by all the assets of the issuing bank, no particular class of assets being set aside for that purpose. It is evident that good, short-

term commercial paper also serves as a kind of security for current redemption, since some of the paper in a bank's folio is constantly coming due, and the paper which is not due can usually be sold in the market. When times are dull or panicky, however, these sales cannot be made, and even the paper that is due may be uncollectible. In such times a cash reserve is absolutely necessary if a bank is to continue redeeming its notes.

This plan has the great advantage of permitting a bank to issue notes as long as there is a real need for them, provided that it can get enough lawful money for reserve purposes. An increase in the real demand for bank notes is always evidenced by an increase in the supply of good commercial paper. There is one danger to guard against. When times are good, every business is promising and men are eager to borrow in order to extend their operations. Business men are likely to become too optimistic and to seek loans which are unwarranted by actual prospects. Even the bankers may be deceived. As a result, they will exchange their notes for commercial paper that is not as good as it looks and a day of reckoning must come. The danger of over-expansion will be greatly minimized if all the bankers are strictly limiting their note issues to an amount against which they are able to maintain adequate cash reserves. Additional reserves are harder to get as over-expansion increases. When times are good, prices rise; the balance of trade goes against us; and gold begins to flow out of the country, thus reducing the supply of money available for bank reserves. This plan, intelligently carried out, is the best system of note issue.

A further security is usually provided for note holders by giving them a prior claim over depositors on the

assets of a liquidating bank. If the assets of a failed bank are insufficient to pay both the note holders and depositors, even after the stock holders have contributed the extra amount for which they are liable under the double-liability provision, note holders are paid before depositors. The law protects note holders better for various reasons. In the first place, measures for protecting them are more obvious and more easily applied. Then, legislatures have a way of thinking that notes form a different kind of liabilities from deposits, whereas they are essentially the same. Finally, it is undoubtedly true that depositors, as a class, are better informed and can more easily protect themselves, and so have less claim on the protection of the law. Notes circulate among the poor as well as among the rich and also among people who live at a distance from the issuing bank. The poor are often not in a position to judge the worth of a particular bank's notes, and, if they were, they could not refuse to accept them in many cases for fear of losing their jobs. For these reasons it is right that note holders should be given a preferred claim to all or some part of the assets of a liquidating bank.

As a final security for bank notes the government sometimes steps in and guarantees their ultimate redemption. If the credit of the government is good, this feature immediately gives the notes a wide range of acceptability, which is desirable. The objection to this plan is that it places too great a burden on the government. If the banking system breaks down, the credit of the government is affected, and any banking system should be made so sound that government support is unnecessary. If it is in this condition its notes will be accepted quickly enough. It may be argued that the government will not be hurt if the system is going to

be sound anyhow. Quite true, but in such a case government guarantee is unnecessary, and, after all, the danger of failure, like the sword of Damocles, is always suspended over the government's head. Moreover, if the credit of the government should decline, as was the case with the United States during the Civil War, the loss of confidence in the government might be reflected in the credit of the banks, thereby rendering the whole situation infinitely more embarrassing.

These are the principal means that have been devised for directly securing the ultimate redemption of bank notes. Their security is indirectly made better through certain regulations which the government sometimes imposes upon issue.

71. *Limit of issue.*—Bank note issue has been the subject of much legislation. Bank notes, through their service as a medium of exchange, have a peculiar interest to all the people and should be issued only under such conditions as makes for the greatest public good. This does not mean that their issue should be hampered by much legislation. It has often been well said that every restriction on good banking is a tax upon the public. A community which needlessly restricts the use of credit in any form voluntarily puts fetters upon its industries and places them at a disadvantage in competition with those of other communities where credit is allowed to develop in a natural way. Only such regulations should be imposed as are absolutely necessary for insuring sound banking. In general, it may be said that restriction of note issue should be designed to secure good quality and not to regulate quantity. The quantity of notes should never be arbitrarily regulated except when necessary for the guaranteeing of good quality. With these principles in mind, let us examine some

of the various regulations which are imposed on note issue by law.

The quantity of notes is limited in various ways. A bank may be allowed to issue a certain quantity of uncovered notes with the provision that all issues above that relatively small amount shall be covered dollar for dollar with gold. This is the case with the Bank of England. Notes issued under this requirement are nothing more than gold certificates, similar in character to our gold certificates which the federal treasury exchanges for gold. While these notes are more convenient than gold and are undoubtedly safe, they are not a good form of bank note, because their supply cannot be increased except upon the deposit of gold. The supply bears slight relation to the needs of business.

An elastic limit may be placed on note issue, the law requiring that a tax be paid on all issues in excess of the ordinary amount. The German law imposes a tax of five per cent on the surplus issue. This element of elasticity is intended as a provision for an emergency issue, which will be retired as soon as possible because of the heavy tax. If a tax is to be levied for regulative purposes, it would be more scientific to base the tax on deficiency of reserve instead of on excessive circulation. Such a tax would tend to regulate quality directly, and would, of course, indirectly regulate quantity. The Federal Reserve Act imposes a tax on deficiency of reserve.

An arbitrary limit may be placed on the circulation. The issue of the Bank of France in 1913 was limited to about 6,000,000,000 francs ($1,200,000,000). This restriction, however, is more apparent than real, as the legislative body has always raised the limit whenever there was any prospect of its becoming effective. An

arbitrary limit of this kind, placed upon ordinary circulation would, if effective, be absurd.

The issue of national banks is limited to an amount equal to their paid-in capital. There is a good reason for this limitation where notes are issued by a large number of independent banks with no central control. The justification for the scheme is to be sought in the other defects of the system, however, rather than in any inherent qualities of its own. In the case of small banks it is proper that some definite ratio should be established between banking capital and note issues. The capital is a kind of guarantee of the obligations of a bank, in addition to the ordinary assets acquired in the course of business, and should, therefore, bear some reasonable proportion to all the liabilities of the bank.

72. *Other forms of regulation.*—In addition to limitation of issue, two other kinds of regulation are ordinarily imposed upon banks of issue. The first of these is the requirement of redemption. A good system of redemption serves various purposes. In the first place, it is a means of insuring parity of bank notes with standard coin. It is a test of solvency. An important service is the retirement of notes as soon as they have performed the work for which they were issued. Every bank should pay out only its own notes and return all other notes to the issuing banks for redemption as soon as received. Such a system may be voluntary, as in Canada; or compulsory, as in our federal reserve system. Most of our national banks have seldom taken the trouble to return notes of other banks. A good redemption system is practically impossible where so many independent banks of issue are scattered over as wide a territory as the United States. The annual redemptions of national bank notes have averaged about 50

per cent of the circulation. Under the Canadian system, with a territory almost as scattered as ours, but with fewer banks of issue, the entire circulation is redeemed about twelve times over in the course of a year. Under the Scotch system the circulation is redeemed about twenty times over during each year. Swift and easy redemption gives to the notes of the Canadian banks an enviable reputation for soundness. The details of the scheme will be explained in a later chapter.

One of the most important forms of regulation is the requirement of reports and the official inspection of accounts and methods of operation. In the case of the large central banks of issue of Europe, publicity alone is usually a sufficient guard against careless administration. But where a banking system is composed of numerous small banks, as in this country, it has been found wise to provide for frequent governmental inspection in order to make sure that the published reports do not misrepresent the facts.

National banks are examined at least twice during each year, and they are not notified in advance as to when the examiner is coming. This is as it should be. Otherwise they might so arrange their business as to make a good showing at the time of the report or examination.

73. *The "banking" vs. the "currency" principle.*— Two schools of thought have developed regarding the volume of bank notes which a community needs. The issue was sharply drawn in England during the controversy over the Bank Act of 1844. Advocates of the "currency" principle believed that note issues should be fixed at a point where they would exactly vary in amount with changes in the supply of gold. They agreed that a small uncovered issue might be made, pro-

vided the amount of uncovered notes should be so small that the demand for note circulation could never by any chance fall below it. All notes above that amount should be covered dollar for dollar with gold. The defect of this scheme has already been pointed out. The plan assumes that a country always has need for a limited amount of bank notes. This amount is ascertained by experiment and may be issued upon a basis of the bank's assets and need not be covered by gold. Any issues above that amount will merely displace gold from circulation to the exact amount of the issue, as they are issued only upon deposits of gold. No changes in the total currency supply can be brought about through changes in bank note circulation.

Exponents of the "banking" principle admitted that the demand for money within a community is fixed at a given time, but contended that the amount changes from time to time. If the price level and the rates of interest were to be kept steady the money supply should be made to vary with the demands of trade. They pointed out that variation of the bank note circulation is the best way of securing this elasticity.

Let us examine the two principles in the light of American conditions. We know that there are wide variations in the demand for money in the United States. Our need for money varies from year to year. More important still, there is a marked seasonal variation in the need for money, due to the call of the West for funds to defray expenses of planting in the spring and of harvesting and crop moving in the fall.

In a former chapter we saw that the supply of commodity money cannot be made to vary to any great extent in accordance with the demands of trade. Fiat money would be elastic, but we do not have it. The

only kind of money left is credit money, of which there are two kinds: government credit money and bank notes. We will show later that government credit money can never be made elastic. Bank notes are, then, the only element of our money supply that can be made elastic.

How can bank note circulation be made elastic? We know already that it can be made to vary with the demands of commerce if banks are permitted to exchange their notes for commercial paper. Jevons, an able advocate of the currency principle, says in his "Money and the Mechanism of Exchange":[1]

> Everyone who promises to pay gold on a future day, thereby increases the anticipated supply of gold, and there is no limit to the amount of gold which can thus be thrown upon the market. Everyone who draws a bill or issues a note, unconsciously acts as a "bear" upon the gold market. Everything goes well, and apparently prosperity falls upon the whole community, so long as these promises to pay gold can be redeemed. . . .
>
> But foreigners will not hold such promises on the same footing; and, if the exchanges are against us, the metallic, not the paper, part of the currency will go abroad. It is at this moment that bankers will find no difficulty in expanding their issues, because many persons have claims to meet in gold, and the notes are regarded as gold. The notes will thus conveniently fill up the void occasioned by the exportation of specie; prices will be kept up, prosperity will continue, the balance of foreign trade will still be against us, and the game of replacing gold by promises will go on to an unlimited extent, until it becomes actually impossible to find more gold to make necessary payments abroad.

There is a large element of truth in these statements. We have already pointed out the danger of over-

[1] See pages 315, 316.

expansion and the safeguards which should be provided, viz., the maintenance of adequate gold reserves, the provision for swift and sure redemption, the intelligent scrutiny of all commercial paper that is offered, and a close observation of general business conditions. The use of any kind of credit contains an element of danger, but this is no argument that it should be abandoned entirely. We take the risk of using steam and electricity for the conveniences which they bring, although the danger of explosion, collision, or electrocution is ever present.

It remains to be shown why government credit money cannot be made elastic. No credit money can be made elastic unless it is issued on a basis of commercial paper. Our national bank notes have not been elastic; greenbacks have never been elastic; no form of credit money has ever been made elastic except when issued in exchange for commercial paper. For obvious reasons, no government can go into the business of discounting commercial paper. Such a practice would lead to a state of governmental paternalism and would throw open the gates to such a flood of corruption that it is not to be thought of under our present political organization. Since a government cannot make its credit money elastic it should leave the issue of credit money to the banks, under such conditions as will secure soundness to the system.

After a government has once embarked upon a policy of issuing credit money, it is hard to withdraw. Political considerations sometimes override the dictates of sound monetary theory. Finally, the change money of the country consists of small coins of credit money. The element of elasticity is here not as important as the need for uniformity. Coinage should always be car-

ried on by the government for this reason, and, in the regulation of bank note issue, care should be taken that all the notes are as nearly uniform in appearance and quality as possible.

74. *Profits from issue.*—Some people are unable to see why a bank should be allowed to issue and charge interest upon notes for which they pay no interest. When a merchant exchanges his promissory note for the note of a bank, why should his note be discounted when he accepts the bank's note at par? There are two reasons. In the first place, the bank's note is worth more to the merchant than his own. The bank's credit is better known. Then it must not be forgotten that the merchant's note is a time paper, whereas that of the bank is payable on demand. This is the real basis for discounting commercial paper.

How does a bank make profit on its issue? Let us take national bank notes, for example. Suppose a bank invests in bonds, say, at 101 and interest, less 1/32, when the market rate of interest is 6 per cent. The following calculation shows the profits for a year, assuming that all the notes remain in circulation:

PROFITS FROM CIRCULATION BASED ON U. S. REGISTERED 2's, 1930, AT 101 AND INTEREST, LESS 1/32

$50,000 2% bonds would yield		$1,000.00
$50,000 circulation loaned at 6%		3,000.00
		$4,000.00
Less: Tax on circulation, ½%	$250.00	
Sinking fund to retire premium on bonds, to be set aside each year	12.61	
Expenses (plate, express charges on notes returned, etc.)	62.50—	325.11
Net income with circulation		$3,674.89

Net income from loaning	$50,484.38	
(cost of U. S. Bonds—allowing for accrued interest) at 6%		$3,029.06
Increased income with circulation over loaning cost of bonds		645.83
Less interest at 6% foregone on 5% redemption fund		150.00
		$495.83

It is evident from the above table that profits decrease as the price of bonds rises. Now suppose a bank issues its notes without being required to set aside any particular class of assets as security for them. Suppose the bank carries a 60 per cent reserve against circulation and pays a tax at the rate of one-half per cent per annum. The profits will be represented by the following table:

PROFITS FROM $100,000 CIRCULATION

Money at 5%.

Gross income:			
	$100,000 circulation loaned at 5%		$5,000
Less:	Tax on circulation, ½%	$500	
	Interest foregone on 60% reserves:		
	$60,000 at 5%	3,000	
	Expenses	100	
	Total deduction		3,600
Net income from circulation			$1,400

From this table it appears that a profit of $1,400 is made, which is a profit of 1.4 per cent on the transac-

tion. This is the reward for the risk assumed by the bank and for its service to the community. If the risk increases, the bank will have to charge a higher rate of interest on loans or raise its rate of discount, thereby increasing its margin of profit.

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CHAPTER VII

LOANS AND DISCOUNTS

75. *Nature of loans and discounts.*—The bank loan or discount is in reality an exchange. This point must be clearly understood at the outset. The borrower exchanges his promise to pay money for the bank's promise to pay money. He makes the exchange because the bank's credit instrument possesses certain advantages over his own; the bank makes the exchange because of the profit derived from the transaction. The charge which the bank makes has been explained in a previous chapter.

A distinction should be made betweeen loans and discounts. When a man negotiates a loan of $1,000 for one year with a bank, he receives $1,000 from the bank at once in the form of money, or in some kind of bank credit, such as a deposit, or letter of credit. In return, he promises to pay $1,000 at the end of a year with interest, say, at 5 per cent. If the transaction takes the form of a discount, however, he receives not the full $1,000 at the beginning, but that amount less 5 per cent. In the case of the loan the full principal is received at the beginning and the interest is paid when the transaction is closed or at stated periods after the loan is made; in the case of the discount, the charge is deducted from the principal at the outset.

If both rates are the same, the bank will receive, in the first case, $50 at the end of the year; in the second, $50 at the beginning of the year. Evidently the latter is

more desirable for the bank. To equalize the payments, true discount would be charged and would be computed as follows:

$$\$1{,}000 - \frac{\$1{,}000}{1.05} = \$47.62$$

Fifty dollars at the end of the year is equivalent to $47.62 at the beginning, when the interest rate is 5 per cent. Bank discount is figured by simply multiplying the principal by the rate of discount, because it is simpler. No injustice is done to the borrower because competition among the banks lowers the rate to a point where the yield is the same as it would be if the charge were figured according to the method of true discount—i. e., the rate is lower than it would otherwise be. When a borrower has an option between a loan or discount at the same rate, it is obviously to his advantage to accept the loan. Such an occasion sometimes arises in small transactions as between borrowing from a bank or from an individual. The great majority of bank transactions take the form of discounts. We shall use the term loans to designate both loans and discounts, unless a distinction is specified.

76. *Demand loans and loans on time.*—Loans may be made for a definite time or they may be made subject to payment on demand or call. Time loans are ordinarily based on bona fide commercial transactions, the time for which the loan is made being about the same as the time lapsing between the purchase or manufacture and the sale of goods. The reason for fixing the time in this way is that the loan is supposed to be repaid out of the fund derived from the sale. If the time were made longer, these funds might be squandered or converted to other uses. These so-called com-

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mercial loans are generally considered more conservative, as the banker has some tangible evidence of security. Such loans are not infallibly safe, however, and much of the prejudice against loans on personal security or prospective earning power is unreasonable. Loans made for capitalizing new enterprises are called financial loans. They are admittedly open to abuse and should be made only after careful investigation. The final criteria are the intent and ability of the borrower to pay.

Demand loans are ordinarily secured by a deposit of collateral in the form of stocks and bonds. They may be called at the option of the bank; on the other hand, the borrower reserves the right to pay at any time. The rate of interest varies from day to day with the market rate; the rate on time loans is fixed for the whole time in advance. In call loans the rate may vary from 1 to 3 per cent when money is easy, to as high as 100 per cent in times of panic. Money is said to be firm when the rate runs from 6 to 8 per cent. It would appear, on first thought, that call loans are a very desirable form of loans for the bank, although they usually bear a comparatively low rate of interest. In case a sudden call for funds arises, the bank can immediately call enough of its loans to meet the emergency. Experience has shown, however, that the matter is by no means as simple as this. In time of crisis, when the bank needs its money the most, it may be unable to call its loans for the simple reason that borrowers cannot pay. The bank cannot afford to offer the collateral for sale for fear of breaking the market. For this reason, it is dangerous for a bank to carry too large an amount on call.

Most of the lending on call has been done in New York in connection with stock market transactions.

The stock exchange is sensitive to the least financial disturbance and much evil has undoubtedly arisen out of loans for stock speculation. Contrary to the opinion of many people, New York is not entirely to blame for these transactions. The custom has been practically forced on New York bankers through the operation of the national banking system which permitted country bankers to deposit large sums of reserve money in the New York banks. These deposits were subject to call and the New York banks were forced to protect themselves, in turn, by lending them on call. In times of crisis country banks have suddenly called their deposits out in enormous sums and, too often, the New York banks have been unable to call their own loans in sufficient amounts to meet the demand. Panic has often been the result. In a later chapter we shall see how the Federal Reserve Act proposes to remedy the situation.

77. *Limit to the extension of credit.*—In discussing this topic it is essential that we bear in mind the fact that a loan is really an exchange of credit. Evidently a bank can lend to a particular individual only as much as he can repay. The principles according to which this amount is determined have been discussed in a previous chapter. We may now inquire as to the total amount which a given bank can lend.

When a bank grants a loan, accepting the credit instrument of the borrower, it gives in exchange either standard money, or the credit instrument of the government or of other banks, or some form of its own credit. If every borrower should take gold or government credit money or the notes of other banks, the limit of the bank's lending power would be approximately the same as the amount of these kinds of money which it could obtain from stock subscriptions, deposits, and other sources.

Banking would be much simplified, but it would be much less profitable and much less advantageous to the community.

As a matter of fact, most borrowers take in exchange some form of the bank's own credit—usually circulating notes or deposits. In the United States, by far the greater part of loans are balanced by deposits against which the borrower checks as occasions arise. This accounts for the close correspondence between the items of deposits and loans on bank statements. Now, deposits are usually promises to pay on demand; circulating notes always are, in the United States. It appears, then, that the total amount of a bank's loans must be limited by the amount of these demand obligations which it is able to assume. Certain cash reserves must be carried against the bank's liabilities. The status of the reserve is really the determining factor which limits the total loans which a bank can make.

Shall a bank make loans for long periods of time or for short periods? This depends upon the kind of liabilities which the bank is assuming against its loans. A trust company or savings bank, which has long-time deposits, can grant loans for a relatively longer period. Most of the loans of commercial banks must be made for periods of from thirty to ninety days. It is also important that a bank shall arrange its loans so that the maturity dates shall rotate evenly, or in such a way as the business of the bank shall dictate. For an ordinary bank it is important that a certain proportion of its loans should be constantly coming due. Where a bank does a seasonal business, as is the case with summer resort banks, its loans should mature when the heaviest demands come from its depositors. Such a bank usually finds it advisable to invest a part of its funds in

securities which can be readily sold at the right time. Sometimes the bank will find it necessary to borrow from another bank in a different community. It will tender to the lending bank certain securities as collateral. The logical thing, often, would be to sell the promissory notes which it has discounted for its customers. This practice is called rediscounting.

A bank should not lend too great a proportion of its funds to any one person or in any single industry. In the words of an old proverb, it should not carry all its eggs in one basket. In conclusion we may say that the limit of a bank's total loans will depend upon the number of applications which come from good borrowers, upon the status of the bank's reserves, upon the nature of its business, upon facilities for rediscounting, upon general business conditions, and upon other considerations which may arise from time to time.

Mr. William Law, vice-president of the Central National Bank of Philadelphia, in an unpublished address, has made a fourfold classification of bank borrowers.

78. *Investment loans.*—First, investment borrowers —parties who borrow to invest the proceeds of the loan in certain securities or property which they wish to carry with a view of reselling at a profit, or of holding until funds can be accumulated to pay for the purchase, or of enabling the holder to gain certain control or influence, or of otherwise accomplishing some object external to the transaction. Such are the loans ordinarily granted brokers, investment bankers, and market operators. These loans are usually secured by the deposit of collateral and can be readily realized upon in proportion to the convertibility or salability of the securities deposited; that is to say, under normal conditions, such a borrower will pay his loan at one bank from the pro-

ceeds of the transaction or by selling the securities pledged there or by borrowing from another bank.

Loans of this character, if they are obligations of active and capable men, and especially if payable on demand and secured by well-distributed and properly margined collaterals possessing a broad market, are an excellent investment for a portion of the funds of a bank. However, when money is redundant, such loans yield a comparatively low rate of interest and are often open to the dangers of call loans which have already been discussed.

79. *Industrial loans.*—The second class is made up of automatic or seasonal borrowers. By these terms it is intended to describe the operations of manufacturers, merchants, farmers, drovers, and other like borrowers who require temporary accommodation during a period of production, transportation, distribution, or collection. These are the ordinary commercial loans which have been described.

The rediscounts of other banks are a favorite form of loans of this sort, especially if the borrowing banks are located in sections where seasonal borrowing is the usual rule and are, therefore, themselves seasonal or temporary lenders. The risk is slight and proceeds of rediscounts are likely to remain on credit with the lending bank in much larger proportion than are the proceeds or ordinary loans. A bank usually borrows to increase its reserves; a firm usually borrows for spending purposes.

Rediscounts were until recently looked upon with disfavor in the United States. Borrowers did not like to see their paper peddled about by the banks and thought that an attempt to rediscount was a sure sign of weakness on the part of the bank. Nevertheless, banks, es-

pecially those in the South and West, did a considerable amount of rediscounting in secret. In order that the rediscount operation might not be betrayed by the bank's indorsement, a paster bearing the indorsement was attached to the note and removed before it was returned to the original maker. The prejudice against rediscounting was unreasonable. The commercial paper which a bank holds should be one of its most liquid assets and the sale of the paper is no evidence of weakness. Rediscounting forms one of the most valuable features of the great European banking systems.

The above-mentioned two classes are considered most desirable loans; the two following, less desirable.

80. *Capital loans.*—The third class is composed of capital borrowers. This phrase is intended to describe the borrowing of permanent capital for a business to be repaid from profits as they accumulate. This is a financial loan and is likely to lead to continuous loans and over-trading. For instance: The president of a manufacturing corporation, constructing a new plant, finds that its cost exceeds the capital subscribed by the stockholders. He borrows the necessary money by issuing notes which are discounted by a friendly bank. This loan can be extinguished only by borrowing elsewhere, by continuous operation at a profit, or by the sale of the plant.

The weakness of this position would quickly be made manifest should manufacturing operations cease. All capably managed banks discourage such loans in any substantial measure unless conditions are unusually favorable for continued high earnings which can be applied to reducing steadily such a loan within reasonable time. Capital for requirements of this character should be

provided by additional subscription of stockholders or by sales of bond issues. That is to say, the funds should be held in the form of permanent or long-term borrowing at the option of the borrower through bonds secured by mortgage.

This idea is expressed concisely by the advertisement of a prominent Chicago bank: "Conservative banking consists in caring for many interests, while capitalizing none." The statement of a strongly organized manufacturing corporation or firm indicates quickly convertible assets abundantly sufficient to protect all quick liabilities. Of course, from the standpoint of the manufacturer engaged in a highly profitable line of work, the temptation is alluring to endure for a period the sacrifices, buffetings, and annoyances of carrying what is termed a plant debt, knowing that he will thereby be enabled to maintain permanently a low capitalization and thus render the task of dividend earning lighter for all time to come when the plant debt shall once have been extinguished out of earnings.

As has been said before, all financial loans are not necessarily bad; but they should be made by a bank only after the most painstaking investigation. As a rule, they run for a considerable length of time and thus are not a suitable form of loans for commercial banks.

81. *Mortgage loans.*—The fourth class is made up of long-time or permanent borrowers on mortgage. To this class belong the holders of improved and productive central real estate in the larger cities. Because of the length of the loan and the difficulty of finding a ready market for mortgages, in times of emergency, this class of loans has not been considered as suitable for commercial banks. They are generally placed with corporations controlling trust or permanent funds, such as insurance

companies, savings banks, trust companies, and mortgage loan and investment corporations.

Before the passage of the Federal Reserve Act, national banks were prohibited from taking mortgages, except to secure a debt previously existing, and were severely criticised for taking them indirectly. Any national bank not situated in a central reserve city may now make loans secured by improved and unencumbered farm land, situated within its federal reserve district. But such loans may not be made for a period exceeding five years, nor may the amount of the loan exceed 50 per cent of the actual property offered as security. The total amount of this kind of loans which a bank may make is also limited to one-third of its time deposits.

82. *Single- and double-name paper.*—Single-name paper has only the name of the maker. A credit instrument on which the name of more than one person, firm or corporation appears, either as maker or endorser, is called double-name paper. At first thought it would appear that each additional indorsement that goes on a paper makes it all the more secure, and that, therefore, two- or three-name paper is better than single-name paper. This would be true if the paper bearing two or more names originated in the same way as the single-name. This is seldom the case and the best paper in the United States is of this latter class. An examination into the source of the two kinds of paper will reveal the reason.

A retailer buys a bill of goods which he intends to sell in ninety days. Not having a sufficient amount of capital to pay for the goods at once, he arranges with the wholesaler to carry him for the period, and turns over his note for ninety days. The wholesaler, in turn, indorses

the note over to his bank and pays the manufacturer from the proceeds. The note which the bank gets is double-name paper. Many of the strongest wholesale houses, however, have adopted the custom of carrying their customers on their books without taking a note. They discount their own notes directly at the bank, in order to get funds with which to meet their obligations. Banks usually scrutinize the borrower's business carefully before granting this kind of loan. Strong retailers, also, often discount their notes directly at the bank, thus enabling themselves to take advantage of the usual discount for cash. Custom has thus made the single-name paper the stronger in the United States, for the simple reason that it is put out by stronger houses.

Much is to be said in favor of using double-name paper as it is used in Europe. If a wholesaler makes a legitimate sale, he can discount his customer's note at the bank more readily than he can obtain a loan upon a mere financial statement, whether his own condition is exceptionally strong or not. It is contended, on the other hand, that retail purchases are made in small amounts and that if a note were put on the market, for each purchase, the market would be filled with small notes drawn for odd sums with varying dates of maturity. This would complicate bookkeeping transactions. On the whole, it seems desirable that wholesalers should be encouraged to take promissory notes, rather than carry their customers on book accounts; but it seems equally desirable that the transition should not be made so suddenly as to embarrass traders who have become accustomed to the single-name paper system.

83. *Acceptances.*—Acceptance is a comparatively new term in American finance. We must go to Europe to find a well-developed system of acceptances. What is

the nature and the object of acceptances? Mr. Paul M. Warburg has written an excellent monograph on the subject entitled *The Discount System in Europe.* He points out that we have given our permanent investment securities a nation-wide market through the creation of the corporation and the transformation of the old unsalable partnership shares into bonds and stocks, which are readily negotiable. But our promissory notes, or temporary investments, still retain their primitive form, and have only a local market. In Europe the promissory note or "bill" has been transformed into a "bill of exchange," and great discount markets have been created where these bills can be exchanged freely at any time.

Let us see how the acceptance arises. Suppose Jones buys a bill of goods from Smith for which he wishes to pay at the end of ninety days. He instructs Smith to draw a draft on him for the amount payable in ninety days and arranges to have his banker accept the bill. Smith easily discounts the bill with his banker, who forwards it to Jones' banker for acceptance. When Jones' banker stamps the word "accepted" across the face of the bill, he transforms it into a virtual promissory note of the bank and gives it wide acceptability. It can now be easily traded on the market and serves as one of the many substitutes for money. The accepting bank, of course, charges a commission for its service, the average charge being from one-fourth of one per cent up to three-fourths of one per cent for three months, according to the conditions of the case. Acceptances form a most desirable kind of investment for bankers as they have a ready market throughout a wide territory.

The Federal Reserve Act permits member banks to

accept bills or drafts drawn upon them, having not over six months to run, provided they arise out of transactions involving the importation or exportation of goods. The total of such acceptances is limited to one-half the bank's paid-up capital and surplus. These acceptances may be discounted at the federal reserve banks. New York State has passed a law permitting state banking corporations to make acceptances on domestic as well as foreign bills. The authorization of rediscounts and acceptances is a notable step in advance for American banking.

84. *Collateral note.*—A collateral note is an ordinary note required of borrowers who pledge collateral to secure the debt. The collateral deposited secures not only the specific debt for which it is pledged, but any other debt that the signer owes to the bank. The bank has the right at any time to demand additional collateral and failure to deposit such collateral makes the note due at once. Furthermore, if additional collateral is not forthcoming the bank has the right to sell the collateral at public or private sale and is permitted to buy it in itself, if it cares to do so. If the sale of the collateral should fail to cover the indebtedness the balance is still an obligation against the debtor. If the signer should become insolvent the bank is a secured creditor and may seize its collateral.

These provisions, which seem so drastic, are necessary in order that the bank may protect itself in times of falling values. The banks making collateral loans usually depend almost entirely upon the collateral and very little upon the general credit of the borrower. There have been numerous cases, however, to show that a bank is not always safe in relying upon the value of the collateral. The great bulk of collateral loans in

Wall Street are call or demand loans. The form of collateral most easily handled is no doubt stocks and bonds, which are extensively dealt in on the Stock Exchange and are marketable on a moment's notice in ordinary times. Real estate and other forms of permanently invested capital are bad collateral for a bank, because of the difficulty in realizing upon them quickly.

85. *Loans on warehouse receipts.*—The second great class of property which may be used for collateral is merchandise and materials representing the investment of that form of capital which it is the legitimate function of banks to provide. If the calculations of the owner are not amiss, this property will be prepared for the market and sold within the near future, so that it embodies the best quality in a collateral security in that it will be liquidated naturally and thus provide funds with which to repay the debt.

But certain difficulties present themselves. Merchandise and materials cannot be delivered to the bank as can stocks and bonds. If they are left in the possession of the borrower, they may disappear, or substitution may be made, or they may deteriorate through neglect. These risks can be avoided only by placing the goods in the possession of a third party, who acts as trustee for all concerned, and who is required by law to conform to certain rules which make fraud and loss impossible. The trustee issues a certificate, called a warehouse receipt, which contains a description of the property deposited. This receipt forms a legitimate collateral for bank loans.

Loans on warehouse receipts have increased to a marked degree in recent years. The growth is largely accounted for by the standardization of various kinds of merchandise used for the purpose, by the development of warehouse insurance, and by the passage of

uniform laws by several states. At first, such loans were looked upon as a species of pawnbroking, but most banks now look upon them with favor. Some banks still prefer not to accept receipts for warehouse goods as collateral at all, but require a transfer on the books of the warehouse to themselves, taking a non-negotiable receipt therefor. In so far as warehouse business is based on speculation it is not a proper source of collateral for commercial banks.

86. *Loans on open book accounts.*—Some bankers lend funds to business men on the security of open book accounts of their customers or on instalment contracts. This business is strongly discountenanced by the more conservative bankers, they classing banks who engage in it with pawnbrokers. Bankers who do this business claim that it is exactly the same as the old business of discounting trade paper. They argue that as trade paper is now no longer given by customers to the same extent as formerly, the merchants have none of it to discount at their banks and, therefore, it is permissible for them to borrow on the funds due them from customers, although these are not in the form of notes. Conservative bankers, on the other hand, say that under present conditions of banking competition any business man can borrow on his general credit all the bank funds he is entitled to and that those merchants who can get funds only by assigning and hypothecating their book accounts are undeserving of any bank credit at all. The custom of lending on open book accounts is an outgrowth of the single-name paper system.

87. *Usury laws.*—Any rate of interest higher than that fixed by law is usurious. How then can New York bankers and money brokers charge forty or eighty per cent for call money?

Before explaining how this is possible, let us see just what is meant by the legal and maximum rates of interest, as fixed by statute in most states. There is a very wide misconception of what is meant by the legal rate. Contrary to the usual impression, it is not always the highest rate that can be charged for borrowed money. Instead, it is, for example, the rate that the court would impose if a judgment to collect an account "with interest" were entered. If the legal rate in the state where the judgment was entered happened to be six per cent, the defendant would have to pay six per cent. The maximum legal rate is the highest rate that can be charged for money, and any rate above the maximum is usury.

In some states, as, for example, in New York and Pennsylvania, the legal and maximum rates are the same —six per cent; in Alabama both rates are eight per cent; in Illinois the legal rate is five per cent, and the maximum rate seven per cent; in Kansas six per cent and ten per cent respectively; in Indiana six per cent is the legal rate and eight per cent the maximum rate.

Although the maximum rate in New York State is six per cent, bankers can charge any rate of interest for call loans by reason of a section of the state banking law which says: "Upon advances of money repayable on demand to an amount not less than $5,000 made upon warehouse receipts, bills of lading, certificates of stock, certificates of deposit, bonds or other negotiable instruments pledged as collateral security for such repayment, any bank or individual banker may receive or contract to receive and collect as compensation for making such advance any sum to be agreed upon in writing by the parties to such transactions." Thus the banker can charge any rate for call money for sums of $5,000 and more that the borrower is willing to pay. With a time

loan—a loan made for a specified period, as ninety days—the interest cannot be higher than the maximum rate.

Most people believe that a call loan is for one or two days only. Some call loans run forty days or even more. It should be remembered that the interest on call loans changes with the fluctuations in call money rates; the interest on a time loan remains the same during the life of the loan.

CHAPTER VIII

DEPOSITS AND CHECKS

88. *Special and general deposits.*—There are two kinds of deposits, special and general. A special deposit may consist of anything of value left with the bank for safekeeping. The relation between the bank and the depositor in such a case is that of bailee and bailor. The title to the deposit does not pass to the bank, but rests in the depositor. The bank is held to use ordinary care in protecting it, and if it is stolen without negligence on the part of the bank, the owner must bear the loss. The banker must return to the depositor the identical thing deposited. If the bank accepts a consideration for keeping the deposit, it is held by law to exercise greater care. Safety deposit business does not present any perplexing problems to the student who views banking as a whole.

General deposits are obligations of the bank to pay money. They may be payable on demand or at a stated time in the future. The great bulk of commercial bank deposits are payable on demand. They create between the bank and the customer the relation of debtor and creditor, the title to the deposit passing to the bank, while the depositor acquires a right to receive a stated sum of money. The bank may satisfy a depositor by the payment of legal tender, no matter by what form of money or credit instrument the deposit was created or how much the legal tender may have depreciated.

The legal tender greenback issues during the Civil War permitted the banks to pay their depositors depreciated paper money, even though gold had been deposited. At the time it was customary to make special contracts wherein gold payment was specifically agreed upon.

Interest is usually paid on time deposits, but not on demand deposits. In some cases where an important depositor is accustomed to carry a heavy balance with the bank, a special arrangement may be made whereby a low rate of interest is paid on the average daily deposit. For example, it is customary for banks in the United States to pay interest on government deposits or the deposits of other banks. The rate is usually two per cent. Interest is paid on these deposits because they are virtually time deposits, although nominally payable on demand.

89. *Origin of deposits.*—Bank deposits are created in various ways. Money may be turned over to the bank, checks or other cash items may be deposited, and, finally, the proceeds of loans and discounts may be left on deposit with the bank. The last two form the basis for the bulk of bank deposits. Most of the checks and drafts which a business man receives in the course of the day's business are sent to the bank for deposit and are not cashed. Because of this custom, checks serve as a more effective substitute for money than is possible with other credit instruments of limited acceptability. The ordinary credit instrument of limited acceptability, such as the promissory note, does not effectively economize the use of money, as it ultimately calls for the payment of money. The need for money is merely postponed. With the check the case is different. While checks call for money in the same way, they usually go back to the bank for deposit and not for cash. If there

is only one bank in the community it is easy to see that one deposit is drawn down only to build up another, and no money changes hands. Where there are many banks the matter is more complicated, but the results are the same, as we shall see when we come to discuss the clearing house.

Borrowers usually leave a large proportion of the proceeds of their loans on deposit with the bank. Otherwise the banks could not lend as freely as they do. It is not an uncommon occurrence for a banker to ask a prospective borrower how much of the loan he intends to leave on deposit. The borrower who does not deposit is not considered as a desirable customer. In the same way, a depositor who habitually draws out large sums at unexpected times is an embarrassing customer for a bank to have.

A bank is always eager to get cash deposits. Money can be used as reserves against further extension of credit; and it is by extending credit, by the making of loans and discounts, that a bank earns its profits. Checks and other cash items serve to offset the ever recurrent demands which the bank must meet at the clearing house.

90. *Reserve against deposits.*—A bank must carry a reserve against deposits for the same reason that leads it to carry a reserve against circulating notes. The problem is peculiar in the United States. We have seen that national banks do not need to carry any reserve against circulating notes because of the five per cent redemption fund at Washington and because of the slowness with which notes come back for redemption. With deposits it is different. It has been estimated that, while the average dollar of money in the United States is exchanged only twenty-two times in

the course of a year, the average deposits are turned over fifty times in the same period.

It must not be assumed that the bank has to pay out money each year to an amount equal to fifty times the total deposits. We must remember that in most cases a withdrawal of one deposit means an addition to another.

How much reserve shall a particular bank carry against deposits? The answer to this question depends upon the nature of the bank's business, upon the amount of money which is called for from day to day. The amount will vary as between different banks and at different times of the year. Experience and foresight are the only guides.

As a rule, a bank which has a large number of small depositors does not need as heavy a reserve as the bank which has a small number of large depositors, any one of whom may be able to prove embarrassing. The bank with small depositors can figure on averages and is on a better basis, although this principle should not be carried too far. Bookkeeping expenses and other overhead charges connected with small deposits may be so great as to wipe out all the profits if the deposits are too small. This is especially true in a large city where an expensive clearing system must be maintained. There is a golden mean for each bank.

Reserves must be increased at certain seasons when the demands for cash are especially heavy. When the people of one community are sending money to another community, a much smaller percentage of the checks and drafts are redeposited than is the case in ordinary times. Money not only leaves the bank, it leaves the community; and there is no prospect of its returning to the bank at an early date. Woe to the bank which

is confronted with such a situation when its reserves are low. The fall demand for money for crop-moving purposes forces such a situation on our eastern banks every year. The difficulty has not always been met successfully, as the wrecks incidental to many crises will testify.

At a time such as we have just described the banks would be greatly relieved if they could sell the commercial paper which they have in their possession and use the proceeds for the protection of their reserves. This paper cannot be sold in the open market because usually everyone is in the same need for money. From this the need for a great central institution which will always stand ready to rediscount the paper of individual banks becomes apparent. But even the resources of a great central bank would soon be exhausted if it should pay out gold during such a crisis. The condition can be improved by vesting in the central bank the power of elastic issue of circulating notes. The banks which rediscount their paper can pay these notes out and hold their reserves. Even the central bank cannot issue notes to an unlimited amount. Foreigners who hold our securities, in the shape of stocks and bonds, may become alarmed and throw them on the market. This may force us to export gold. Evidently the central bank must be prepared to redeem its notes in gold if the situation is to be saved. It is seen, then, that a gold reserve must ultimately be back of the whole system and that the volume of notes which the central bank can issue will be determined by its gold reserve. We shall see later how the great central banks of Europe issue notes and how it is proposed that the federal reserve banks may protect and build up their reserves of gold in such a crisis. We see, already, how dangerous a thing it is for a country to develop deposit banking

to such a great extent as we have developed it in the United States without developing an adequate system of rediscount and bank note issues at the same time.

91. *Reserves in the United States.*—In the United States the ratio of reserves to deposits has been fixed by law. Under the National Banking Act national banks in central reserve cities (New York, Chicago, and St. Louis) were required to maintain a reserve in lawful money of twenty-five per cent against deposits. In certain other cities, called reserve cities, the amount was twenty-five per cent, but one-half of this might consist of demand deposits in certain central reserve city banks. All other banks, called country banks, were required to carry a fifteen per cent reserve, of which three-fifths might be deposited in banks of reserve and central reserve cities. The five per cent redemption fund could be counted as a part of the reserve. The Federal Reserve Act does not permit the five per cent fund to be counted as reserve, but it lowers the other reserve requirements. The details of this Act will be gone into later. The various states make legal reserve requirements for state banks.

The establishment of a fixed legal reserve requirement has certain disadvantages and should not be resorted to unless necessary. During certain seasons the high reserve requirement piles up a useless mass of money in the banks which cannot be used for productive purposes.

92. *Guaranteeing deposits.*—A movement has long been on foot in the United States for the guarantee of bank deposits by the federal government or by the states. The plan has been tried in Oklahoma, Kansas, Nebraska and Texas, and has been urged elsewhere. Bank failures, and losses to the depositors resulting

therefrom, have been so small in the past that it is estimated that a small assessment on each bank would create a fund large enough to pay the depositors of all insolvent banks. In this way confidence in the banks would be implicit and they would not become subject to "runs."

The plan has been vigorously attacked, however, by the banks. Their position is substantially that the system would place a premium upon incompetent and dishonest banking, and under present conditions there is little doubt of the correctness of the contention. The strong bank would be taxed to pay the depositors of the failed bank, and at the same time it would lose the prestige that results from its strength. Depositors would pay little attention under such a system to the stability of a bank, because their deposits would seem to them as secure in one bank as in another. They would be governed largely by the inducements offered by the various banks, and in spite of strict regulation of these inducements it would be very difficult to keep them from being made without the knowledge of the authorities. The inevitable result would be the establishment of many new banks, expansion of credit, speculation, and, finally, collapse.

The advocates of the plan claim that these conditions can be prevented by frequent and searching examinations. The position is correct only if such examinations are possible, and it has been the experience of the country that they are not. Many banks have failed, only to have the receivers discover that they have been insolvent for years without the knowledge of the authorities who have examined them. This would be particularly true if a national system of guarantee were adopted to cover eighteen thousand banks operating under different con-

ditions. Whether or not effective examination is possible in a single state where banking conditions are uniform will be seen in the experience of Oklahoma; and upon the effectiveness of the examination and regulation depends the success of the system. It will be watched with interest, because, if it proves practicable, it may be generally adopted as a great advance in the science of banking.

93. *Inducements to depositors.*—There is keen competition among banks for deposit accounts. In return for the use of the general deposit which is so profitable, banks have been led by competition among themselves to offer many valuable inducements to depositors. Among these are the following:

(a) CHECKS.—The bank pays the checks of the depositor, taking the risk of their being genuine and that the money is paid to the person designated by the depositor or his order. This service is of great value to the depositor for it saves him the inconvenience and the expense of making cash payments.

(b) COLLECTIONS.—It collects the checks and all other items of credit for the depositor, often at considerable expense. It offers the depositor a cheap and easy way to collect accounts due by drawing sight drafts on his debtor and collecting them through his bank. Since the growth of the custom of sending local checks in making small payments to creditors located in the larger cities, the associated banks in several of the larger cities have been compelled to establish a uniform fee for collecting out-of-town checks, the rate usually being one-tenth of one per cent, with a minimum charge of ten cents per check.

(c) SAFETY.—The bank relieves the depositor of the risk of caring for his money.

(d) LOANS.—The bank usually feels under obligation to lend to a depositor on more advantageous terms and usually on less rigid requirements than to non-depositors. It can do so because it is more or less acquainted with the affairs of the depositor and can accept personal credit when collateral security would be required of non-depositors. The greatest advantage, however, comes in times of panic, when funds are needed most and when all the banks are refusing to lend to others than their depositors.

(e) INTEREST ON BALANCES.—Sometimes the banks pay interest on the daily balances. This practice was an innovation of the trust companies and was due to the fact that the deposits in the banking department of the earlier trust companies were practically time deposits. When the character of the deposits gradually changed to demand deposits, the custom still prevailed.

(f) INCREASES CREDIT.—The bank connection frequently increases the credit of the business man. A good banking reference is frequently of great advantage in business, and the banks must be constantly on their guard against persons who use their connection with the bank to gain unmerited credit.

94. *Deposits used as currency.*—Attention has already been called to the way in which deposits circulate under the guise of checks and drafts. These are known as deposit currency. The check is simply a temporary form which the deposit takes for circulation.

This form of credit has been found to be much better suited to thickly settled communities than the bank note currency; whereas, in new regions with poor banking facilities, notes are still the favorite medium. This is because of the fact that in new regions transactions are smaller, whereas in the cities transactions are large and

it would be most burdensome to carry about large amounts of bank notes with which to settle obligations.

It is only in English-speaking countries that the deposit currency has reached its fullest development. In the United States the growth has taken place mostly in the last half-century. Up to 1855 the note issues of the banks exceeded their deposits. In that year deposits forged ahead somewhat, but it was not until the National Banking Act went into effect that they were given the real impetus. Since that time deposits have increased out of all proportion to the increase of the capital invested in banking, while notes have materially fallen back in proportion.

The increased density of the population and the consequent growth of the banking habit is partly accountable for this change. The growth is largely due to the need for some kind of an elastic medium of exchange. Our bank notes were inelastic. The growth of deposit banking in England may be partially explained in the same way. France and the other European nations have not felt the need for deposit currency to such a degree because of the excellency of their bank note system. The ideal system would have both deposits and circulating notes symmetrically developed so as to complement each other. We shall see that the Canadian system is developed in this way.

95. *The clearing house.*—The handling of check transactions becomes a complicated matter as the number of banks in a community increases. If there were only two banks in a given place, the proposition would be simple. Two clerks could meet at one or the other of the banks and compare the claims that each held against the other. But if thirty banks are doing business in the community, each bank will have to send

twenty-nine messengers out with the claims against the other banks. Each bank will then have to settle the balances due to every other bank individually. The money will have to be carried through the streets, with a constant danger of robbery. Such a process is inconvenient and expensive. The clearing house is an institution designed to overcome the difficulty by providing a common meeting place to which each bank can send its claims and have them set off against the other claims which other banks present against it. The clearing house becomes the only creditor and the only debtor of each bank.

96. *The clearing house and a panic.*—A clearing house is primarily an institution for facilitating the settlement of balances among banks. The practical operation is fully described in Part II of this book. It may, however, perform other useful functions.

One of the most valuable of the secondary functions is the checking of financial panics. During a panic the demands for money are so heavy that some of the weaker banks may be in danger of losing their cash reserves and being forced into suspension. The suspension of one bank often causes a general loss of confidence and runs may be made on all the banks. No bank could pay all of its depositors if they should demand their money simultaneously.

In order to prevent a general breakdown of the credit sytem, the banks unite through the clearing house in the issue of clearing house loan certificates. These must not be confused with the ordinary clearing house gold certificates which are used in the daily transactions. The usual procedure is for the clearing house association to appoint a loan committee, if one is not already in existence. A resolution is passed which permits any

member to present to the loan committee its bills receivable or other securities, and receive, in return for such securities as are approved, certificates for a certain per cent of the par value of the securities deposited. These certificates may be used for payment of balances at the clearing house and they usually bear interest. The interest charge operates as an inducement for the banks to retire their certificates as rapidly as possible. The whole scheme amounts to an agreement among the banks not to demand cash payments from each other.

In some instances the idea is carried even further. The prominent merchants and business men of a community may agree to accept loan certificates in lieu of cash. The banks may then put the certificates out in smaller denominations suitable for general circulation. Such a practice is contrary to law, but is usually winked at by the authorities on the ground that it is a public necessity. Anyone, in such a time, might demand payment in legal tender and enforce his claim in the courts; but such an act would not be favorably regarded by the public.

Public authorities often go far in the attempt to relieve panicky conditions. For example, the Governor of California, during the panic of 1907, declared a legal holiday for eight weeks. During this entire period no debts were collectible except at the option of the debtor, and the whole judicial system of the state was suspended. Similar measures were taken in other states.

Various kinds of so-called "shinplaster currency" are issued in times of panic. Individual banks, both state and national, issue circulating notes. Business houses also put out scrip, as did the Standard Oil Company in New York City during the panic of 1907. All these

issues are illegal, but the authorities are ready to excuse almost any remedial measures at such a time.

97. *Collection of country checks.*—The rapid increase in the use of checks in the country and in small towns, as well as in the larger cities, has presented some vexatious problems to banks in the financial centers through which these checks must pass. Rather than ask a bank to draw exchange, the country merchant sends his check directly to his creditor in payment of his account. This practice has been encouraged by the city merchant because he has been able to deposit the check with the bank at par. The volume of this kind of business has assumed such proportions, however, that the item of check collections has become quite prominent in the expense account of city bankers. So burdensome have the charges become that various methods have been devised for escaping them. In many cases checks are not sent directly to the banks upon which they are drawn, but some other route is selected in order to avoid exchange charges. Mr. Cannon, in his work on Clearing Houses, cites a remarkable case of zig-zagging to avoid collection charges: A check on Sag Harbor, New York, paid to a Hoboken firm, was eleven days in reaching its destination. Had it been collected through the New York Clearing House, ten days' time, fifteen hundred miles of travel and a vast amount of clerical work might have been saved. City checks are cleared in an efficient manner. Why not extend the clearing principle to cover banks at a distance?

As long ago as 1858, London adopted a system of collecting out-of-town checks by a daily interchange among London bankers of checks on their branches, or on banks having an account with them. The plan is still in successful operation. A few cities in the United

States have adopted the London method. Perhaps the most successful case is Boston, which has adopted the London method with slight variations, the chief difference being that out-of-town checks are forwarded by the clearing house directly to the banks on which they are drawn, the clearing house acting as agent for the member banks.

The Boston system has been in operation since 1899 and now includes over ninety per cent of the banks in New England. As early as 1883 the expense incurred by Boston banks in collecting country checks under the old system was estimated at $400,000 per year. Since the new plan has been in operation the average yearly business has been increased to $600,000,000, and the average yearly cost is seven cents per thousand dollars. The total annual cost on a much larger business has thus been reduced to about $42,000.

With few exceptions, checks only are collected. In some cases checks on a town treasurer or on a corporation are accepted if made payable at a bank. It is objected that the practice of collecting checks through the agency of a clearing house has disarranged the business relations which formerly existed between Boston banks and those in the larger cities of New England. This is true, but the banks are generally of the opinion that they have been benefited on the whole.

The system is somewhat similar to that of the New York Clearing House. Deliveries must be made to the clearing house not later than 3.30 P.M. daily, except Saturday, and then at 1.15 P.M. Each bank gets a receipt for the amount of its delivery and the sum is charged to the clearing house on the following morning. The bank thereby receives payment for all its New England checks only one day later than Boston

collections. The checks are mailed out to the country banks by five o'clock on the day of delivery. The expenses of the clearing house are charged to the member banks in proportion to their average daily business.

The clearing principle has worked successfully in almost every city where it has been tried, except where competition among the banks forced its abandonment. It has been urged that it could be applied generally with certain modifications, and that a system of exchanges between various clearing houses could be devised that would mean an enormous saving in time and expense. The Federal Reserve Act provides that the reserve banks may be required by the federal reserve board to perform the functions of clearing houses for member banks and that the board may itself act as a clearing house for the reserve banks or that it may require one of the reserve banks so to act.

CHAPTER IX

DOMESTIC EXCHANGE

98. *Payments between communities.*—In the preceding chapter we saw how payments within a community are made by use of checks and how an economy in the use of money results. Payments between different communities may also be made by checks. For example, Smith in Seattle may remit to Jones in Louisville by means of a check on his own bank in Seattle. Upon receipt of the check, Jones will deposit it with his Louisville bank and may be permitted to check against the deposit at once.

But it will evidently be some time before the check can be returned to Seattle and the actual funds placed in the Louisville bank. Moreover, certain collection expenses must be paid. Consequently the Louisville bank will make a charge for collecting the check, the amount being fixed by competition or agreement among the banks in the city. In addition to making a collection charge, the bank may refuse to allow Jones to check on the deposit until the funds have actually arrived from Seattle. The inconvenience of delay and, more especially, the high collection charges often make this method of remittance prohibitive. Creditors will either refuse to accept checks from customers on local banks, or they will insist upon the checks being drawn for an amount above the actual debt sufficient to pay collection charges.

When the use of local checks becomes prohibitive the debtor is forced to apply to his bank for a draft which will be accepted in the city where the amount is payable. In all probability the Seattle bank will be unable to sell a draft on a bank in Louisville, for the reason that it has no balance there to be drawn upon. Plainly it would be impossible for each bank to keep balances in every other city in the country, although it would be highly desirable for every bank in the country to be able to sell drafts on some one city. To do this they would either have to keep funds on deposit with some bank in the central city or keep balances with another bank that did. In either case, the bank with which these relations are maintained is called a correspondent bank.

99. *Exchange on New York.*—New York is the city on which drafts are drawn for making payments between different communities. It was not necessary that the banks of the country should get together and arbitrarily decide to make New York a central city; it was not a matter of chance. New York is naturally the commercial as well as the financial center of the country. Merchants in every community are constantly buying goods from New York to an extent that is greater than the purchases from any other city. Consequently, New York is the principal city upon which all the banks of the country should be prepared to sell drafts.

Not only are payments in New York made in New York exchange, but payments between different cities throughout the country are made in the same way. Seattle remits to Louisville by using a draft on New York. The Louisville bank is willing to accept the draft because it knows that it will have a call for New York exchange. The draft is forwarded to New York for credit

against which the Louisville bank can draw. Should some one enter the bank at the right moment and ask for a draft for the same amount as the Seattle draft, the exchange might be sold directly, without the bank's going to the trouble of depositing in New York and drawing a new draft. In practice, drafts are drawn for odd sums and cannot be used in this way.

100. *An illustration.*—We may now inquire a little more closely into the way local banks get their power to sell drafts on New York. We will suppose that a bank in Cedar Rapids has on deposit $10,000 with the First National of Chicago. Now suppose that a Cedar Rapids dealer has sold corn in the East and has received in payment a draft for $1,000 on the Corn Exchange Bank of New York. He will deposit his draft in his Cedar Rapids bank, which will send it to its Chicago correspondent, thereby increasing its credit balance to $11,000. The Chicago bank will send the draft to its correspondent in New York, say the National City Bank, and so increase its credit balance by $1,000. The National City sends the draft through the Clearing House for collection and it is finally cancelled at the Corn Exchange.

By an agreement with the First National Bank of Chicago, the Cedar Rapids bank is able to sell drafts on the National City Bank of New York, using for the purpose blank drafts furnished by the First National. It is quite possible that on the same day a merchant in Cedar Rapids, who has bought goods in New York, will call on the Cedar Rapids bank for a draft on New York. He will not want a draft for exactly $1,000, but that does not matter. The bank can sell him a draft for any amount up to $11,000, which is the extent of its balance in Chicago. Thus, because of New York's

trade relations with all parts of the country, banks everywhere usually are able to sell drafts on that city, thereby saving the expense of currency shipments.[1]

When it is taken into account that New York checks and drafts are every day being used in this way for the cancellation of debts in all parts of the United States, it will be readily understood why New York exchange is deservedly called "the business man's money."

101. *Currency shipments.*—While in the long run the movement of goods from New York and to New York must practically balance, it would be a rare coincidence if the commodities sent from any given locality to New York exactly balanced the goods received from that city. Any particular bank, therefore, has occasion to purchase more New York exchange than it needs to sell, or it has a demand for more than it has occasion to buy or receive on deposit from its customers. Unless the country bank wishes to shift its deposit account from a New York bank to some other bank, it will be necessary to make a shipment of currency.

In case a country bank has a deposit with its New York correspondent which it considers large enough, it will accept deposits of checks on New York only with the intention of making shipments of cash to reimburse itself for sums paid out. The shipment of currency involves expense and it is quite likely that it will not accept superfluous New York exchange unless it receives a fee which will cover the cost of collecting the check in cash. This cost depends upon three items; first the express charge, second insurance, and third the loss of interest. The charge for transportation is usually combined with the charge for insurance by the express company. The moment the New York bank delivers the

[1] See J. F. Johnson, "Money and Currency," Chapter V.

cash to the express company for shipment to the country bank upon its order it ceases to pay interest upon that sum. The country bank therefore loses the interest upon the money until it receives it and uses it as a basis for interest paying loans.

The cost of currency shipments between New York and Chicago is fifty cents per thousand dollars; between St. Louis and New York it is sixty cents; between New Orleans and New York it is seventy-five cents, and between San Francisco and New York it is one dollar and fifty cents.

102. *Settlements through the sub-treasuries.* — The cost of shipping currency from one city to the other is frequently saved to the banks by the federal treasury. For a good many years payments between the treasury at Washington and the sub-treasuries in the various large cities were all made by cash shipments. It happened very frequently that at the same time that the treasury was forwarding considerable sums of cash between two cities, the banks would be shipping currency in the opposite direction. An ingenious cashier in New Orleans early in the seventies suggested to the Secretary of the Treasury, McCullough, that a saving both to the government and the banks might be effected if the banks when they wished to transmit money to a city in which a sub-treasury was located would ascertain whether the government at the same time did not wish to send money in the opposite direction. If this proved to be the case it would be profitable to the banks and to the government to allow the banks to deposit the money in the treasury and receive an order upon the treasury in the other city. The treasury office in the first city would receive the currency it required from the depositing bank and the bank in the other city would receive the currency

from the treasury instead of from its correspondent and all cost of transporting money would be eliminated.

103. *A seasonable movement of currency.*—In the long run the supply of New York exchange in a community is about equal to the demand for it. This is another way of saying that each community in the long run sells to other communities as much as it buys from them. In certain seasons of the year, however, agricultural districts buy much more from the East than they sell to it. This is always the case in the winter and spring. No crops are then being harvested, yet merchants all over the country are laying in their stock of spring and summer goods. As a result, there is so strong a demand throughout the country for drafts on New York that country banks are generally obliged to make some shipment of currency to New York in order to cover the drafts they sell. The opposite condition prevails in the fall when the crops are marketed and are going forward for export. Then the farmers of the West and the planters of the South are receiving in payment for their goods eastern checks, which they deposit in local banks. Country banks now find their balances piling up in New York and are unable to sell New York exchange as fast as they would like. As a result New York City banks are usually ordered in the fall to make shipments of cash to the West. In the winter and spring, when the West is a heavy buyer from the East, New York exchange is usually quoted at a premium in western cities. In the autumn it is usually at a discount, all banks having an excessive supply.

There is another reason for this seasonal movement of currency between New York and the country districts. In the autumn, when the crops are harvested, there is a great increase throughout the West and the South in the need for "hand-to-hand money." This must be furnished by the country banks, and they are forced to draw on their New York balances, first by sales of New York exchange and finally by ordering the cash shipped to them. In the winter and spring cash flows

back into the country banks, until they have more than they can profitably use. Then they build up their New York balances either by buying and remitting exchange or by shipping currency.[1]

104. *Equilibrium of demand and supply.*—The premium or discount on domestic exchange is published in the principal dailies and is useful to the business man as indicating the volume and direction of trade at any particular time. An unusually high premium on New York exchange or an unusually prolonged premium will indicate that the purchases of local merchants have been unusually heavy in that year if there are no unusual transactions to affect the price of exchange.

Why does it not happen that under certain circumstances a community may buy more goods than it sells during any particular period and thus be forced to part with all of its currency in settling the balance? Since each trader is simply looking out for his own private profit and does not concern himself with the question of the amount of currency there seems to be no reason why a community might not be drained of its currency. This brings up the question of the balance of trade, the principles of which are the same whether the exchange of goods is between two separate nations or between two localities within the same nation.

Suppose for any reason that there should be an unusually heavy purchasing of goods by the merchants of a western state in any particular year. The merchants would buy from the banks New York exchange with which to pay their bills. The banks, after having exhausted their credits in New York would be obliged

[1] See J. F. Johnson, "Money and Currency," pp. 82–83.

to ship currency in order to cover the drafts on New York sold to the merchants.

Despite this possibility there is never any danger that a community will be stripped of its money or cash as a result of its purchases of goods from other communities. No matter how freely Chicago and the country tributary to it may purchase goods from the East, those purchases can never make any serious drain upon the cash supply of Chicago. No matter how extravagant the people of the West may be, their purchases of eastern goods can never be greatly in excess of their sales to eastern customers. Should the people of Chicago for extraordinary reasons at any time increase their purchases from New York and other eastern cities, the first effect in Chicago would be an increase in the demand for New York exchange and in bank shipments of currency from Chicago to New York. The loss of currency in Chicago, since it would reduce the lending power of Chicago banks, would tend to cause a rise in the rate of interest and a rise in the value of money. The prices of certain commodities would begin to decline; not of all commodities, but of those which are subjects of speculation, such as stocks, wheat, corn, and pork. Most of the speculators in these articles are borrowers, and the interest they pay is an important item in the expenses of their business, so that when the interest rate rises they are obliged to contract their operations. Chicago would thus become a good place to lend in and also a good place in which to buy stocks and bonds, wheat and other speculative commodities. In other words, the value of money would rise in Chicago, and people in other parts of the country would increase their purchases in Chicago markets, remitting New York exchange in payment. The reader must not suppose

that these changes in price or in the rate of interest need be so great as to attract general attention. Nevertheless it cannot be doubted that such changes do take place, and that as a result the sales of Chicago to other parts of the country are so adjusted that in the long run they furnish a supply of New York exchange equal to the demand.

Thus it happens throughout the country that in the course of a year the debts of every community are always practically balanced by its credits on account of sales, so that large shipments of currency are never necessary. Indeed, if our monetary and banking systems were perfect, shipments of currency from one part of the country to another would seldom occur as a necessary result of trade transactions. Money or currency would only be shipped to a community as a result of increasing need for it as a medium of exchange or as a basis for the expansion of bank credits. In Canada, for example, on account of the elasticity of its bank-note circulation, seasonal variations in the demand for currency are easily provided for by the local banks and their branches.

105. *Bills of exchange.*—So far we have considered only checks and drafts drawn on banks as the substitute for money in making payments between communities. Drafts are also drawn by individuals and firms upon each other. In the United States these instruments are usually called drafts when all parties to the transaction live within the country; and bills of exchange when one of the parties lives in another country. The principles involved are the same and, in Europe, both are called bills.

One essential of a negotiable bill is that it be made payable to bearer or to order. Bills of exchange cannot be passed from hand to hand as easily as bank drafts,

however, for the reason that the bill's credit is more often called in question. Our domestic bills of exchange could be given a wider range of acceptability by adopting a system of acceptances such as is used in Europe. Under our first system, domestic bills are not an effective substitute for money; they merely postpone the demand for it. The acceptance is a real substitute.

Bills of exchange may be payable at sight or on time. The date of payment may be fixed at, say, sixty days from the date on which the bill is drawn, or at sixty days from the time when it is presented to drawee for acceptance. When a time bill is sold to a bank it is, of course, discounted according to the time that is to elapse before maturity. The rate of discount will depend upon the state of exchanges and upon the market rate of interest. It, therefore, behooves a man with bills to sell to watch the market closely so as to sell to the best advantage, i. e., when the discount is lowest. This is especially important in foreign exchange operations.

In fixing the discount rate, the banker considers the interest rate that prevails in the community on which the bill is drawn as compared to the prevailing rate in his own community. When the interest rate in Chicago is high as compared to that in other communities, bankers over the country are eager to get funds into Chicago. The easiest way to do this is to buy bills payable in Chicago. The increased demand raises the price of Chicago bills. Of course, the rate of exchange, and thus the rate of discount, is also affected by the balance of trade and the movement of securities. The principles of exchange operations will be more fully developed in Part III of this volume, which treats of Foreign Exchange. The principles of domestic exchange are exactly the same as those of foreign exchange. The latter is a slightly more com-

plicated subject because of the difference in money units in various countries, and because of the fact that gold alone can be used in settling balances; whereas, other kinds of money can be used in settling balances between different communities within the country.

CHAPTER X

THE RATE OF INTEREST

106. *Primary concepts.*—The rate of interest is the percentage which the borrower pays the lender for the use of his loanable capital. Let it be remembered that capital consists of all wealth which the people produce in excess of their immediate needs, and which is saved for use in the production of additional wealth. Capital is of two kinds, capital goods and loanable funds. The tools and machinery of the manufacturer, his raw materials, and the means of subsistence needed to carry him over the period of production before the products of his labor and investment are sold—these are his capital goods. They are the result of a previous saving on the part of some one. If capital goods are sold for money they take the form of loanable funds. The money may be deposited in a bank or lent to some one. The savings now take the form of credit. Loanable funds usually consist only of money and credit.

Let us suppose that a man converts all of his capital goods into gold. Does it make any difference to him whether the purchaser uses them in production—thereby maintaining the total supply of capital goods—or consumes them without producing anything—thereby decreasing the supply of capital goods? It certainly does. If the supply of capital goods is depleted, their price will rise and his gold become less valuable. It is of the greatest importance that this truth should be thoroughly understood. It shows how completely the value

of loanable funds, of money and credit, is dependent upon the world's supply of capital goods. After all, it is machinery and iron and food that are needed for the production of steel rails, not money or credit.

The man of business, when he speaks of capital, thinks of money and credit available for use in business. He will do well not to forget that there is another kind of capital which, after all, is ultimately demanded if production is to continue. A chest of gold or a bank deposit is not a hoe, or a bag of seed, or a loaf of bread.

107. *How the interest rate is fixed.*—The rate of interest is determined by the demand for and the supply of loanable funds. Interest may be looked upon as the price which the borrower pays for the use of loanable funds. The price of anything is fixed by the interaction of demand and supply. This is a simple statement and we know that it is necessary to go behind it before we can get at the real forces which operate to determine the rate of interest. Let us, then, examine the forces of demand on the one hand and the forces of supply on the other, just as was done when trying to find out how the value of a commodity is determined.

The demand for capital comes from men who see opportunities to make profit in business. If they do not have enough capital of their own they must seek it elsewhere.

A man, for example, thinks he sees large profits in the manufacture of a pump he has invented. His own savings amount to $10,000, but he finds that if he had $20,000 he could put up a larger plant and make bigger profits than if he employed only his own capital. Therefore he tries to borrow $10,000. The maximum rate of interest which he is willing to pay depends altogether upon the rate of profit he expects to make. If he feels certain that he can make twenty

per cent, he may be willing to pay ten or fifteen per cent for borrowed capital rather than not have the use of it.

Just as the value of a commodity is determined by what is called its marginal or final utility, so the rate of interest is fixed by the marginal productivity of capital. The demand for capital is not the same with different borrowers. One man might be willing to and able to pay ten per cent, whereas another would see no hope of profit if he paid over six per cent, and still another might not be able to pay over four per cent.[1]

The total demand for capital, therefore, will increase as the interest rate is lowered, and will diminish as the rate is raised. Almost anyone could find profitable employment for additional capital if the rate of interest were made sufficiently low.

Suppose the supply of capital is fixed at a certain amount and that lenders are willing to lower the rate of interest until all is lent out. Borrowers enter the market and bid for capital at various rates. Those who are willing to pay the highest rate will be sure of securing capital, but they will not begin by bidding at the highest rate which they are willing to pay. Borrowers and lenders will bargain, until finally the whole supply will be lent at a fairly uniform rate. If there are enough borrowers, a certain number—those who could not bid as high as the market rate—will fail to secure loans. But we know that, as a matter of fact, the supply of loanable funds is not a definitely fixed amount. We need, therefore, to examine the sources of supply.

108. *Sources of supply.*—In order to find the forces that control the supply of loanable funds we need to examine the motives by which men are prompted to save and to turn their savings into that form of funds.

[1] See J. F. Johnson, "Money and Currency," p. 137.

We know that some people save in order to provide for old age or a rainy day. Some of these are so impressed with the importance of saving that they will hide gold away under the hearth where it will earn nothing, if that is the best place they can find to put it. If a savings bank were convenient, they would deposit with it even though it should refuse to pay any interest whatever. Nay, they would even pay a tax if necessary in order that their rainy day fund might go on accumulating. If the savings do find their way into the bank in the form of deposits, they become a part of the loanable funds of the community. But this is not the motive that accounts for most of the savings of the world.

The extent to which a man will deny himself present goods in order to lay up funds for the future is a psychological matter. If he thinks he will derive more good by waiting, he will save; if not, he will spend his funds as they come into his hands. Different individuals place different estimates upon the value of present consumption as compared to future consumption. The improvident man must have a higher reward if he is to forego the pleasure of spending his funds at once. He may not be willing to undergo the sacrifice of saving unless he is assured of an interest rate as high as fifteen per cent. Until that amount is offered he will save nothing. Another man may be willing to save if he is assured of a reward of two per cent. Few, a very few, will save for the joy of saving. Evidently the total savings of a community will tend to increase as the rate of interest rises.

Not only will the savings increase when the rate of interest rises, but other forms of wealth will be converted into capital goods. For example, a family horse, which is not being used in the production of wealth,

may be sold to a grocery man and set to work as a new capital good. The proceeds of the sale may be deposited and become a part of the loanable funds of the community.

We see, then, that if the interest rate begins to rise savings will increase, while the demand for loanable funds will fall off. Both these forces tend to check a rise in the rate. On the other hand, if the rate begins to drop, saving will decrease, while the demand for loans will rise. These forces tend to check a fall in the rate. The market rate tends toward that figure which establishes an equilibrium between the demand for and the supply of loanable funds.

109. *Limit to the lending power of banks reconsidered.*—The lending power of banks varies with the savings of the people, so that the bank rate of discount is fixed by the same forces which fix the rate of interest. In this connection we need to remember that the bank loan is really an exchange of credit. All the banks in the world cannot together lend more than the total credit of the people. If they did they would become bankrupt, as the loans could not be repaid. The credit of the people is limited by the amount of wealth which they have already accumulated by saving plus the amount which they will be able to save before the loans come due.

The average borrower always thinks of his wants in terms of money. A manufacturer who wishes to expand his business needs more capital, but always thinks of his need as being for money or credit. He consults the financial page of a newspaper and it tells him that money is "tight" that the rate of discount is correspondingly high, and that the banks are unable to expand their loans. His ability to borrow seems to him, and to the banker from whom he wishes to borrow, to depend altogether upon the supply of money in the community. If "money" is

plentiful, the rate of interest is low; if it is scarce, the rate of interest is high. So business men and bankers usually think of the rate of interest as being determined altogether by the money situation, and often assume that a high rate indicates a need of more money and that a low rate is due to a plethora of money. We have here a confusion of money with capital which it is necessary to clear away, for it has led to mischievous legislation in the past and is today the basis of worthless remedies proposed for the relief of the money market. [1]

110. *Demand for capital distinguished from demand for money.*—A demand for capital is not a demand for money. This is a proposition of much practical importance. The demand for money comes from people who have something to sell; it varies with the volume of exchanges. The demand for capital comes from people who want to borrow and who want to get possession of capital goods. The demand for money yields price; the demand for capital yields the rate of interest. The demand for capital comes from people who wish to buy.

To a certain extent, then, borrowing increases what we may call the borrowing demand for money. The buying demand would be unchanged. Lenders have in their possession a certain amount of funds in the form of money. They may lend it at four or at eight per cent, depending on the strength of the demand for capital, that is, the borrowing demand for money. But the demand for money which determines the value of money will in either case be the same, for evidently no more goods can be bought with money borrowed at eight per cent than with money borrowed at four per cent.

111. *The effect of a temporary change in the supply*

[1] See J. F. Johnson, "Money and Currency," p. 138.

of money.—It seems that there should be some element of truth in an idea which practical business men and bankers have held for generations—the idea that the supply of money has something to do with the rate of interest—and there is. We may lay down the following proposition as a general principle: In the long run the rate of interest is independent of the supply of money, but changes between the demand for and supply of money may affect the interest rate during periods of readjustment. We know that both the demand for and the supply of money are constantly changing and that prices are constantly adjusting themselves to new conditions. Practically, then, the supply of money plays an active part in the fixing of the interest rate from day to day or during periods of price adjustment.

A temporary increase in the money supply in excess of the demand tends to lower the rate of interest; a temporary decrease in supply, as compared to demand, tends to raise the rate of interest.

Let us first consider the effect of a temporary increase in the supply of money. We will suppose that the fabled treasure of Captain Kidd, say $100,000,000, is discovered. The gold will soon be coined ready for circulation. But the country does not need so much money if the price level is to be kept where it is. The additional supply is unnecessary, but no one will think of this. The money will be deposited with bankers who will look upon it as upon any other gold in the vaults—as money possessing a definite purchasing power. Their lending power has been increased without any increase in the demand for loans. Gold in the vaults earns nothing. They will accordingly lower their discount rate so as to attract borrowers to the bank. So long as borrowers

of a desirable class continue to come the bank will continue to lend until its reserve is once more reduced to the normal percentage.

The increased supply of money and credit will begin to circulate and prices will begin to rise. Let us suppose that at the end of a year the price level has become fully readjusted and that it has risen ten per cent. Evidently the man who formerly needed $1,000 for a given purpose, will now need $1,100. The increased money supply is no more effective in making exchanges than the old supply. It is possible that production may have been stimulated and the volume of exchanges increased so that the per cent of rise in prices may be slightly lower than that of the increase in money supply. Let us suppose the two ratios to be equal. The man who wanted to borrow $1,000 a year before will now need to borrow $1,100. Every man will be in a similar condition. The borrowing demand for money will have increased; so will the supply of money. The rate of interest will rise again to its former level. The final result is an increase in the apparent lending power of banks; the real lending power is unchanged.

A temporary decrease in the supply of money as compared to the demand would produce effects just the opposite to those just described. If $100,000,000 were taken to the middle of the ocean and dumped overboard, the interest rate would rise for a while, during the period of readjustment. Finally, it would drop back to the original level.

112. *The effect of a continuous change in the supply of money.*—If the supply of money steadily increases or decreases, without a corresponding increase or decrease in the demand for money, there will be a continual maladjustment of prices, producing a constant effect upon

the demand and supply of loanable funds and constantly affecting the rate of interest.

Let us take the case of a steady increase in the supply of money, in excess of the demand. Prices will move steadily upward from year to year. The manufacturer buys his raw materials and pays his labor at the prices of today, expecting also to sell his goods at the present prices. Six months pass and he finds that he sells his goods at a price higher than he had dared to hope for. He thinks that the real demand for his goods is on the increase and plans to manufacture more for the next year. To do so, he must buy more raw materials, get new machinery and hire additional labor. He will have to borrow. What about the man from whom he buys his raw materials? He is having the same experience and, as a matter of fact, there is an increased real demand for his goods. So on down the line. Everybody begins to plan expansion, business is active and everyone is trying to borrow. The consequence is a steady rise in the rate of interest.

The rise in prices acts as a stimulus to industry. Finally, more goods are produced than will be bought at a profitable price, credit is extended to people whose dreams of a magic future are unrealized, speculation runs rife and finally the collapse comes. If the country is so fortunate as to have a good banking system under the control of far-seeing men, a forthcoming depression will be felt during the early stages, and business may be let down slowly. If the credit system is poor or improperly handled the result will be a panic. How long a country can stand the constant application of the stimulant is a matter for experience to tell. The man who is trained can usually read the signs of the times early enough to contract his credit and prepare for the breakdown.

During the panic the interest rate rises to abnormal heights. There is a scramble for loans, not for productive purposes, but for the payment of debts. After the panic is over there is a period of dullness. Men are afraid to venture into business, prices are low, reserves pile up in the banks, and the rate of interest drops to an abnormally low point.

If the supply of money continues to increase faster than the demand, prices soon begin to rise again. People regain confidence and the same round of borrowing and producing and speculation is repeated. In the meantime, a new generation of business men has come into the field, lacking the experience of the one which preceded it; again new enterprises are floated, and the cycle of unwise production, speculation and panic is repeated.

In the case of a steadily decreasing supply of money, as compared to the demand, the results are just the opposite. Prices fall, business is dull, men sell out their businesses and go into professions, nobody wants to borrow money, reserves pile up in the bank and the interest rate steadily drops.

People will fail to understand the true state of affairs and will imagine that the country has too much money. Before, they thought that the money supply was insufficient. We understand that the real cause for the high rate in the first case was an increasing demand for capital; that the cause of the low rate in the second case was a decreasing demand for capital. It is of the greatest importance that these causes be clearly understood. A steady piling up of bank reserves and a continuous fall in the rate of interest have often given rise to a cry for legislation to decrease the money supply. The relative decrease in the supply of money and the consequent

fall in prices are already responsible for the conditions. Nothing could be more foolish under such circumstances than arbitrarily to reduce the supply of money still further by legislation.

113. *Cycles in the rate of interest.*—In connection with what has just been said, the course of the London money market during the nineteenth century is of interest. The supply of gold in the world available for monetary uses was decreasing and prices were falling during the period from 1810 to 1850. We should expect a fall in the rate of interest. In 1824 the market rate in London was 3.5 per cent. The panic in 1826 raised the average rate for that year to 4.5 per cent. By 1833 the rate had fallen to 2.7 per cent. The use of credit increased for a few years and the rate of interest rose to 5 per cent for the panic year 1839. There was another steady decline until the panic year of 1847, when the rate rose to 5.9 per cent. By 1852 the rate had dropped to an average of 1.9 per cent for the year.

Then came the new supplies of gold from Australia and California. Prices began to rise and the interest rate took an upward turn, which continued with occasional reverses until 1873. At that date prices began to fall because the demand for money was increasing faster than the supply. The interest rate fell until the new supplies of gold from Africa and Alaska began to arrive in the nineties. Since then the tendency has been upward.

A study of the New York money market reveals the same tendencies. Since 1897 the price level has been rising and the market rate of interest has risen along with it in spite of the reverses after the panics of 1903 and 1907. New York is also especially subject to seasonal variations in the rate of interest, particularly in the

call loan market. This is due to the heavy increases in bank reserves during the winter and spring months and the rapid decline in reserves during the months from September to December.

114. *Summary of foregoing principles.*—It may still seem strange that banks should have a large supply of money on hand at a time when prices are falling because of a relative decrease in the money supply; yet this is always the case. It must be understood that abundant bank reserves do not signify an abundance of money, but an abundance of loanable funds, which are abundant during a period of falling prices because few wish to borrow. Heavy bank reserves under such conditions signify scarcity of money, not abundance of it.

On the other hand, it may seem strange that bank reserves should be low at a time when prices are rising because of a rapid increase in the money supply. Depleted bank reserves indicate that people have been borrowing extensively and that the supply of loanable funds is low. When money is plentiful and prices are rising we have increased borrowing and a rising interest rate; when money is scarce and prices are falling we have a slackening of the demand for loans and a falling rate of interest.

115. *Commodity rate of interest.*—By commodity rate of interest we mean the increase in purchasing power of the funds lent as distinguished from the absolute increase in the money returned. When prices are rising the commodity rate is lower than the ordinary or money rate. For example, $1,000 lent for one year at six per cent yields $1,060 at the end of the year. But, if the price level has risen six per cent in the meantime, the purchasing power of the $1,060 is exactly the same as that of the $1,000 at the time it was lent. The in-

crease in purchasing power is zero, that is, the commodity rate of interest is zero. If the percentage of rise in the price level should exceed the market rate of interest, the sum returned at the end of the year would actually be less valuable than the original sum was when the loan was made. The commodity rate would be negative, as the lender would have suffered a loss of purchasing power. When prices are falling, conditions are, of course, exactly the opposite.

These propositions are of the greatest practical importance. Let us suppose that we have a surplus sum of $100,000 which we wish to place to advantage for a period of five years. If we have reason to believe that prices will fall during that period, we will do well to lend the money outright for the whole time or to invest it in bonds. It should be invested in such a way that the money to be returned will be fixed in advance. As prices fall, the annual interest payment will remain the same in amount but will steadily increase in purchasing power. What will be the result if we put the funds in stocks or in some kind of business enterprise where the return is to be in the nature of profits? Since profits decline when prices are falling, the annual return will be lower and lower, and the purchasing power may actually decrease.

The opposite policy will be best if we believe that prices will rise. If our funds are invested in bonds or in some other way so as to yield a contractual return, the annual payments will remain the same in amount but will decrease in purchasing power. If they are invested in stocks, on the other hand, the annual dividends will in all probability increase. They may increase enough to offset the fall in the purchasing power of money, or even to make the actual yield higher and higher.

Business men are likely to be short-sighted and think too little of the trend of the commodity rate of return on capital. These principles explain the fall of bond prices when general prices are rising. Nobody wants bonds when the price level is going up. People who hold funds in trust should be especially careful to watch the trend of the commodity rate.

CHAPTER XI

AMERICAN BANKING BEFORE THE CIVIL WAR

116. *Early American banks.*—The first bank of importance in the United States was established at Philadelphia in 1781 and was called the Bank of North America. It was founded by Robert Morris in the hope that it would give financial support to the young Republic. The capital of the bank was $400,000, of which the government subscribed $250,000. The bank discounted commercial paper, received deposits and issued circulating notes, which it redeemed in specie on demand. The credit of the bank was good and enabled it to make large advances to the government. After the close of the war the bank prospered wonderfully, paying dividends of fourteen per cent per annum. When doubts arose as to whether Congress had the power, under the Articles of Confederation, to charter a bank, the Bank of North America sought and obtained a charter from the State of Pennsylvania under which it continued to do business until 1785. In that year, jealous parties forced a repeal of its charter; but a new charter was granted two years later. Because of its illustrious history the Bank of North America was allowed to enter the national banking system without changing its name, as practically all other banks were required to do, and it has since that time enjoyed almost continuous prosperity.

In 1784 the Bank of Massachusetts was chartered with no restrictions except a provision for examinations

by the state authorities. The right to issue notes was taken for granted, as the very word bank was then understood to designate an institution the chief function of which was issue. At the end of eight years certain restrictions were imposed, such as: (1) A requirement for semi-annual statements to the governor; (2) Prohibition to deal in merchandise or in the shares of any bank; (3) A provision that notes should not be issued in denominations smaller than $5; (4) Limitation of outstanding notes and loans to double the paid-up capital stock; (5) Fixing liability upon the directors for losses incurred through failure to comply with the law. The imposition of these regulations illustrates the way in which the American people gradually came to realize the true nature of banking. The system was still crude.

The third bank to be established was the Bank of New York, which was founded by Alexander Hamilton in 1784 as an alternative to a land bank favored by Livingston. Hamilton saw clearly that land cannot serve as a proper basis for commercial banking. Banking in almost every country has had to pass through a period of land bank craze. The Bank of New York operated successfully for seven years without a charter. Its loans were made for no periods over thirty days and the interest rate was fixed at six per cent. Debts to the bank were payable in its own notes or in specie. As gold coins were at that time badly clipped and abraded, they were received by weight only. The bank was prosperous but became unpopular through its refusal to allow borrowers to renew loans and its steady insistence upon prompt payment of debts. A charter was finally secured in 1791 which contained the following important provisions: (1) that the bank should not hold real

estate, except such as was necessary for its business or such as had been taken as security for loans previously contracted; (2) that its debts, above cash deposits held in the bank, should not exceed three times the paid-up capital; and (3) that it should not deal in merchandise or public securities, except to sell such as were pledged to it as security for loans.

We can easily criticize these banking schemes in the light of principles already laid down; but we must needs be tolerant toward an institution which was in its infancy and which was striving to do business in an undeveloped country. The chief fault of early banking in New York State was its entanglement in politics. No new bank could be chartered except by special act of the legislature. Consequently, charters were handed out as a political spoil. The establishment of the Bank of the Manhattan Company is an interesting incident in this connection.

Aaron Burr, knowing that he could never hope to secure a bank charter from the federalist legislature, hatched a scheme for procuring one by strategy. Taking advantage of a scourge of yellow fever which had just visited New York City and which was attributed to the bad water supply, he applied to the legislature for a charter for a $2,000,000 company which was to supply pure water to the city. Toward the end of the charter, which he drew up, was inserted an inconspicuous clause giving the company power to use any surplus capital, not required for the water business, in any moneyed transactions not inconsistent with the constitution and laws of the state or the United States. The charter slipped through without anyone suspecting the presence of an authorization for banking operations and, within a few months, one-half of the company's capital

was being used in the banking business. The water works were discontinued in 1840; the bank is still carrying on a large business under its state charter, never having entered the national banking system.

117. *First Bank of the United States.*—In 1791, the First Bank of the United States, as planned by Alexander Hamilton, received a charter from Congress. A question was raised as to the constitutionality of the act establishing the bank. Jefferson was of the opinion that it was unconstitutional; but Hamilton persuaded President Washington that it was justifiable, on the ground that it was necessary and appropriate for carrying out certain other powers conferred on Congress by the constitution.

The capital of the bank was $10,000,000, of which one-fifth was subscribed by the government. Private subscriptions were payable, one-fourth in specie and three-fourths in government bonds bearing interest at six per cent. Payments were extended over a period of two years. The government shares were paid in ten equal annual instalments with interest at six per cent. One share was entitled to one vote, three shares to two votes, and so on, no shareholder having over thirty votes. Foreign shareholders could not vote by proxy, which meant practically that they could not vote at all.

The bank was permitted to lend on mortgages but could not hold real estate, except such as was required for the accommodation of the bank. Debts, above deposits, were limited to an amount equal to the capital stock. Directors were made liable for debts above the legal limit. This was, in effect, a limitation on note issue and was the only limit imposed on that activity. The Secretary of the Treasury was given the right to examine the affairs of the bank and to require statements

as often as each week if he chose. Government funds could be deposited with the bank but no requirement was made. The bank was authorized to establish branches which it did in all the more important commercial centers. It was forbidden to buy government or state obligations. It could not deal in merchandise. The rate of interest on loans could not exceed six per cent. Notes of the bank were receivable for all public dues so long as the bank maintained specie payment. The charter was granted for a period of twenty years, during which time the government was pledged to grant no charter to another bank.

The bank, although partly owned by the government, was under private control. The payment of stock in bonds was excused by Hamilton on the ground that the bonds could be gradually converted into money. We see in the charter a provision for stock notes which have already been criticized in Section 62. The bank was a success from the beginning and performed many valuable services for the country. As fiscal agent of the government the bank collected the customs duties. By refusing to accept notes of any bank which was not maintaining specie payment, it practically forced the banks of the country to redeem their notes in specie on demand. This was an incalculable benefit to commerce. The bank has been called the regulator of the currency because of the service which it rendered in this respect.

The charter was to expire in 1811. In 1809, Secretary Gallatin recommended a renewal of the charter with an increase in the capital of the bank. A virulent opposition developed against the renewal. Jefferson still insisted that Congress had no power to grant a bank charter. The country was becoming inflamed against England and it was pointed out that foreigners (mostly

English) owned over seven-tenths of the bank's capital stock. People said that the English had bought this stock so as to be able to throttle American credit in the event of a war with England. They did not appreciate the fact that foreign stockholders had practically no voice in the management of the bank, or the more significant fact that to wind up the bank's affairs would necessitate the immediate exportation of over $7,000,000 in specie to these same foreign shareholders. Many thought the bank was a great financial monopoly which was destroying the liberty of the American people. The state banks were especially vigorous in making this charge. The bill for renewing the charter failed to pass by a vote of sixty-five to sixty-four, and the United States entered the War of 1812 leaning on the state banks for support.

The result was disastrous. A mushroom growth of state banks sprang up throughout the country. Specie payments were suspended in the fall of 1814 by nearly all the banks outside of New England. Bank notes fell to a discount of from ten to thirty per cent. The government defaulted on the public debt.

118. *Second Bank of the United States.*—Attempts were made to charter another national bank. Finally, in 1816 the Second Bank of the United States was chartered. The plan was in most respects similar to that of the First Bank. The capital was to be $35,000,000, of which one-fifth was subscribed by the government as before. The government's subscription was payable either in money or in its own bonds bearing interest at five per cent. It was paid by a stock note and the note was not fully paid until fifteen years later. The bank received an exclusive charter for twenty years, for which it paid the government $1,500,000. It was authorized

to establish branches and was forbidden to pay dividends to stockholders whose shares were not fully paid up. There were twenty-five directors, five of whom were appointed by the President of the United States, and twenty elected by the stockholders who resided in the United States. Foreign stockholders could not vote either in person or by proxy.

The bank was authorized to issue post notes not smaller than $100 and payable within sixty days. No circulating notes were to be issued in denominations under $5. The bank's notes were receivable for debts to the United States. For failure to pay any obligation in specie on demand the bank was to pay a tax of twelve per cent per annum on the claim until it was paid. The requirement to pay deposits in specie as well as notes was a long step in advance. Banks, at the time, were accustomed to pay depositors with notes of other banks, located at a distance perhaps, if they were maintaining specie payments. Because of the expense of collecting these notes they generally circulated at a discount, driving the notes of nearby banks out of circulation. This second bank also acted as the fiscal agent of the government.

For the first three years the bank was in a perilous position. The charter provided that private subscriptions to stock might be paid in three instalments within twelve months. One-fourth was payable in specie and the remainder in specie or in United States bonds. When the second instalment of $2,800,000 came due, only $324,000 was paid in specie; for the third, only a small amount of anything at all was paid. It was discovered that many shareholders had bought the stock as a margin proposition, intending to sell on a rising market. Furthermore, the bank had discounted the notes

of stockholders on the pledge of their shares to the amount of over $8,000,000. Dividends were paid on stock that was not fully paid for, in violation of the law. The president and cashier of the Baltimore branch defrauded the bank of $1,600,000.

When the bank had reached the verge of bankruptcy, Mr. Langdon Cheves of South Carolina was put in charge. He ran the bank on conservative lines and in a few years raised it to a point of great power. It established relationships with the great European banks and was of great assistance to the Government. Nicholas Biddle became its president in 1823.

Andrew Jackson came to Washington as President in 1829 at a time when the bank was at the height of popularity and strength. Early in his administration, some of his friends charged that the bank was using its influence against him politically. Jackson was already inclined to look upon any bank with suspicion and lent a ready ear to these reports. In a message to Congress he wrote that much deserved criticism was being directed against the bank and stated flatly that it had failed to give the country a uniform and sound currency. The latter statement caused much surprise to everybody, since it was the one thing in which the bank had been conspicuously successful. Various charges were brought against the bank only to be disproved by Biddle.

Finally, Biddle so far forgot himself, in his zealous defense of the bank, as to tell the Secretary of the Treasury that the federal government had nothing to say in the management of the bank and that he intended to run it as he pleased. Mr. Samuel D. Ingham, Secretary of the Treasury, retorted that he had power to withdraw the government deposits and that he would do so as soon as he became convinced that the bank was exercis-

ing a political influence. This threat quieted Biddle for a while.

In 1830, Jackson recommended to Congress that a bank be established as a branch of the Treasury Department without power to exert any undue influence upon the public. The proposal was voted down. In the following year he sent another message, adopting a milder tone. Biddle took this as an indication that he was backing down from his original position and thought the time was ripe to strike for a new charter. On the eve of a presidential campaign, it was thought that Jackson would not dare to veto the bill. The opposing party proposed to make the bank an issue in the campaign. Against the advice of friends, Biddle pressed the motion for renewal and it was passed by both Houses of Congress. To Biddle's surprise Jackson vetoed it. An attempt to pass it over the veto failed. Nothing was left but to take the matter to the polls. Jackson was reelected by an overwhelming majority.

The bank war continued. Early in 1833, Jackson decided to remove the government deposits. Mr. Louis McLane, Secretary of the Treasury, objected and was transferred to the State Department. The new Secretary, William J. Duane, refused to withdraw the deposits and was removed from office. Roger B. Taney was next placed at the head of the Treasury Department, and he began to draw out the deposits and place the government funds in certain state banks.

This so weakened the position of the bank that it soon lost its prestige. With all hope for a renewal of the charter gone, the bank took out a charter in Pennsylvania. The government was paid for its stock at the rate of 115.58 and new stock was sold in the place of it, keeping the capital of the bank at the original figure

of $35,000,000. This was too much capital for a bank with so small a territory as the bank now had and some of it was diverted into speculative ventures. The bank finally failed in 1841 and three years later Biddle died poor and broken-hearted.

The great trouble with the bank was that it was under private control and excited the jealousy of the administration. Its failure constitutes a strong argument in favor of government control of a bank which is to have so much power. Proposals for a third bank were advanced later but met with no success. After the Civil War a system was established which was entirely different in character.

119. *The Suffolk System.*—Much is to be learned from a study of the state banks of the period. One of the most interesting developments was the Suffolk System. New England was flooded with the issues of country banks. Because of the difficulty of redemption, country bank notes circulated at varying rates of discount and drove better notes out of circulation. The situation was especially embarrassing to the Boston bankers, who were hardly able to keep any notes in circulation, on the one hand, and, on the other, were constantly subjected to the inconvenience of handling the notes of country banks which were deposited with them.

In 1818 the Suffolk Bank was incorporated in Boston, and it immediately endeavored to work out a plan by which it could make a profit from the redemption of country bank notes. It offered to make itself an agent of redemption for the country banks, agreeing to accept their notes at par provided a deposit was kept with it to pay it for the trouble. At first only a small number of banks availed themselves of the privilege, but the Suffolk Bank retaliated by sending home for redemption the

notes of all banks which did not adopt the plan. The final result was that all the banks in New England became members of the Suffolk System, which continued until the National Banking Act of 1865.

It soon became a clearing house for bank notes, and just as the city clearing houses offset the credits and debits of the various banks against each other in such a way that only balances are paid in cash, so the Suffolk Bank canceled the bank note obligations of all New England. In 1845 the Massachusetts law was changed to provide that no bank should pay out any notes except its own, a provision which strengthened the Suffolk System because it made necessary quick redemption. All bank notes issued would circulate in the pockets and tills of the people as long as there was actual demand for them; when this demand subsided they would be deposited in a bank, and since they could not again be paid out they would be quickly redeemed at the Suffolk Bank.

During the greater part of the existence of the Suffolk Bank there was no provision in Massachusetts for keeping a specified reserve. The system worked so well, in fact, that specie was seldom demanded. In 1858 the Massachusetts legislature passed a law providing for a reserve of fifteen per cent against both notes and deposits. They were thus recognized as liabilities of the bank, equal in every respect. The notes were not intended for general circulation but for redemption when the need for them disappeared, in the same manner that our checks and drafts are redeemed today. Under this system the average life of the bank note was found to be about five weeks.

The operation of this plan illustrates the value of a system of quick redemption. New England bank notes

were issued according to the banking principle, contracting and expanding in volume according to the demands of trade. During panicky times the banks of the Suffolk System were the last to suspend specie payment. Their notes acquired a wide circulation outside of New England. In 1857 five hundred banks were included in the system.

120. *The safety fund system.*—New York State furnishes two interesting experiments in the field of banking: the safety fund system and the bond deposit or free banking system. The first plan is especially worthy of note because of the light which it throws on the proposal to guarantee bank deposits. The second plan is of interest because it was later adopted as a model for the national banking system.

The safety fund system was established in 1829. Each bank was required to contribute annually one-half of one per cent of its capital to a special fund in the hands of the state until its contributions should amount to three per cent of its capital. Out of this fund all the debts of failed banks (except those to stockholders on their stock) were to be paid after the assets of the bank had been exhausted. In 1837 the law was amended so that the notes of failed banks could be paid immediately, provided they did not amount to more than two-thirds of the money in the fund. In that year several banks failed and their notes suffered no depreciation. After 1840, however, the number of banks which failed was so large that the safety fund was too small to meet all their obligations, both notes and deposits. Accordingly, in 1843 the law was again amended so that the fund was made applicable to the payment of the notes alone of insolvent banks.

In 1838, however, the bond deposit system was estab-

lished and all banks incorporating after that date did so under this new plan. This weakened the safety fund because there were no new contributions to it and the burden fell upon a constantly decreasing number of banks. In 1846 the new constitution of New York provided that note holders were to have a first lien on all the assets of a bank and that in case of failure stockholders were to be liable for an amount equal to their holdings of stock. It was further provided that no special charters, such as those under which the safety fund banks operated, were to be granted or renewed. These were important developments in the field of American banking. The safety fund system gradually died out with the expiration of the charters, the last of which expired in 1866. All claims against it were finally paid in full.[1]

121. *The free banking system.*—The free banking law authorized any person or association of persons to receive circulating notes to be signed and issued as money who would deposit with the state comptroller the stocks of the United States, of the State of New York or other approved states, or mortgages secured by real estate worth twice the amount of the mortgage. This deposit of collateral was intended to insure the note holder against loss. No provision for actual redemption in specie was required. Anyone who possessed the necessary securities might enter the banking business, and it is evident that many of them did. Over 130 new banks were organized before 1840. Failures quickly resulted, and it was found that in many cases the securities deposited were not sufficient to meet the notes. Real estate mortgages, however valuable, were not quick assets, hence the law was finally changed so that only the

[1] See Chapter VI.

stocks of the United States and of New York were available for deposit.

The notes circulated at first at considerable discount, but this was overcome to a certain extent in 1840 by an amendment to the law which necessitated redemption of the notes of interior banks in New York and Albany at a discount not greater than one-half of one per cent. This still gave an advantage to the country banker because of the profit he could make by lending his notes at par and redeeming them at a discount. Hence many banks in the cities issued their notes in the country towns. The business of these banks was solely to issue notes. They had no permanent banking houses, and received no deposits. In 1848 this condition was somewhat bettered by a law requiring banks of issue to become banks of deposit as well, but it was never carefully enforced. The effect of these various amendments, however, and of the constitution of 1846 was to improve greatly the condition of the issuing banks, so that failures after 1850 were infrequent and in almost all cases the notes were redeemed at par. After 1860 there were no failures which resulted in loss to note holders.

This system was copied by eighteen other states, including Illinois, Indiana, Wisconsin, but with disastrous results. In none of these states did the system survive long enough to become perfected. In Illinois particularly a large amount of the securities deposited were those of the southern states, which became valueless at the outbreak of the war. The bank currency circulated at great discounts, varying with the reputation of the issuing bank. In 1857 there were one hundred and twelve banks in Illinois; in 1861 only seven, and the note holders had realized less than forty cents on the dollar.

The only advantage of this system over that of the

safety fund, is security, which was proved by the experience of New York after the list of acceptable stocks had been restricted to those of the United States and of New York. No currency could be more secure, that is, more certain of ultimate redemption. This, however, is not the only desideratum of a credit currency. Current redemption is as important as ultimate redemption, and in this the system was defective. Moreover, the system was rigid—when the banks deposited securities they were given the right to issue so many notes, and they could not issue additional amounts no matter what the needs of business might be. In other words, the system was inelastic, an attribute which, along with that of security, it handed down to our national bank note circulation and against which most of the attacks on the system have been directed.

122. *Indiana and Ohio.*—The Bank of Indiana was a successful institution. It was incorporated in 1834 with a capital of $1,600,000, one-half of which was subscribed by the state. It was given a monopoly of banking in the state and the right to establish branches. Each branch was allotted a certain capital and the issue of notes was restricted to an amount twice as great as the capital. Each branch bank was required to accept the notes of other branches at par and to redeem its own notes in specie. During the first years of its existence it attempted to loan on real estate security, but the danger of this custom was soon realized and it was discontinued. Subsequently it loaned to farmers on their personal notes and on their crops, but the loans were always for short periods. In this way it transacted business on sound banking principles and continued to thrive until 1865, when the federal tax on state bank note issue forced it out of existence.

The State Bank of Ohio was likewise well managed and highly successful. It had a capital of $3,300,000 and had thirty-six branches. Note issue was restricted to an amount not greater than twice the capital and was further safeguarded by a safety fund of ten per cent deposited with a board of control. It passed out of existence with the expiration of its charter in 1866.

Both these states secured an elastic and sound bank note circulation. They were especially fortunate in securing good officials for their banks.

123. *Louisiana.*—In 1842 the State of Louisiana passed a bank law which was worthy of imitation. The following were its principal features: (1) No bank was to have less than fifty shareholders, having at least thirty shares each; (2) Directors were made liable for losses suffered through violation of the law unless they could prove that they had voted against incurring the liabilities, if present; (3) Directors were required to attend meetings or to resign after five successive absences; (4) Absence from the state for more than thirty days automatically retired a director from office; (5) Specie reserve to be equal to one-third of all the liabilities; (6) The other two-thirds of liabilities to be represented by commercial paper having not over ninety days to run; (7) All commercial paper to be paid at maturity and, if not paid, the account of the debtor to be closed and his name sent to other banks as a delinquent; (8) No bank to pay out any note but its own; (9) All banks to pay their balances to each other in specie every Saturday under penalty of immediate liquidation; (10) All banks to be examined by state officers quarterly or oftener.

This was the first law passed in any state requiring a reserve against deposits. The amount required is larger than is now considered necessary. By 1860, Louisiana

became the fourth state in the Union in point of banking capital and second in specie holdings. Not all of the provisions of the law would be considered desirable today but, such as they were, they were conscientiously and intelligently enforced until the capture of the city of New Orleans during the Civil War.

124. *Banking in other states.*—The history of banks in which the various states were part owners was, in the main, disastrous. Kentucky tried the experiment in 1806 and again in 1820. Alabama in 1820 subscribed two-fifths of the capital of the Bank of Alabama, issuing bonds in payment. The original restrictions on loans were ample but they were constantly violated. Loans were freely made to members of the Legislature and their friends, and in ten years the discounts increased from $500,000 to $20,000,000. The panic of 1837 found a large amount of these loans worthless, and confidence in the notes disappeared, to be followed by a period of business stagnation. In 1845 the charter expired and was not renewed. Mississippi, Arkansas, Florida and Louisiana had similar experiences. The Union Bank of Louisiana was established in 1832 with a capital of $7,000,000 raised by a sale of state bonds. It failed ten years later, and was followed by the establishment of privately owned banks under sound laws. Missouri's experience was not so calamitous, although the Bank of Missouri was never a great success, and the state's connection with it was severed in 1866.

The state banks, as a rule, did not fail for the same reason that caused the downfall of the two banks of the United States. While, in some instances, the banks became involved in politics, the failure was generally due to defects in organization and management.

125. *George Smith.*—George Smith came to America

from Scotland about the time the State Bank of Indiana was started. After buying some real estate in Chicago, he returned to Scotland and persuaded some friends to come to this country. In 1838 he conceived the idea of establishing a bank. Being unable to get a bank charter directly because of prejudices against banks in the northwestern states, he devised a scheme to get one indirectly. In 1839 he obtained from the legislature of Wisconsin a charter for an insurance company. The charter expressly excluded banking privileges, which meant the right to issue circulating notes. But Smith soon began to issue certificates of deposit, payable to bearer and made similar to bank notes in appearance. These certificates attained a wide circulation under the name of Smith's money.

The charter contained no regulations for this kind of business and the legislature was forced to take notice of the fact that Smith was "wildcatting." A committee investigated the company and found it to be in sound condition, but recommended that the charter be repealed. In 1846 the charter was repealed, but Smith continued to do business as before on the ground that the legislature could not repeal the charter. The circulation rose to $1,470,000 and several runs for specie were successfully met. Smith also bought and sold exchange on New York at the various branches which he established through the West.

"George Smith's money" was an excellent illustration of currency issued according to the banking principle. The weakness of the plan lay in the failure of the state to regulate it properly. Its success was due to the remarkable qualities of the man who controlled the system.

In 1853 Wisconsin passed a law requiring a deposit of bonds against circulating notes. As this kind of

banking did not suit Smith, he sold out his interest in the Wisconsin Marine and Fire Insurance Company and established a bank at Chicago. He then bought up two banks in Georgia, the notes of which he paid out in Chicago. The notes were redeemed in drafts on New York. The approach of the Civil War warned Smith to give up operations in the South. He then retired to London, where he died in 1900, leaving one of the largest fortunes in Great Britain. The Wisconsin corporation later became a national bank.

CHAPTER XII

EUROPEAN BANKING SYSTEMS

126. *Bank of England.*—The Bank of England, like many other banking institutions, had its origin in the needs of the state. It was established in 1694 for the purpose chiefly of assisting the fiscal operations of the government. On account of the war with France the government was badly in need of money. Taxes of all sorts had been levied, but it was very difficult for the government to borrow because of the confiscation in 1672 of funds borrowed in like manner by Charles II. Although this sum, amounting to over £1,300,000, had finally been paid, bankers and individuals of wealth were still very cautious about making advances to the government.

The original charter of the Bank of England provided that it should be given the power to issue notes, to deal in coin, bullion, and commercial bills, and to make advances on goods and merchandise; these powers being contingent upon a loan to the government of £1,200,000 for which the bank was paid eight per cent interest. From its ability to issue notes the bank found itself possessed of an equal amount of currency which it was at liberty to lend. These notes were not payable to bearer, hence passed only by indorsement. They were post notes and bore interest. In 1697 the capital of the bank was increased, a further loan made to the government, and the bank was given the right to issue demand notes without interest.

In 1709 an attempt was made to give to the Bank of England a monopoly of the banking business by providing that no corporation or partnership composed of more than six persons should be given the power to issue circulating notes. The issue of notes at that time was supposed to cover the entire field of banking, hence this provision was understood as prohibiting any organization of more than six persons from engaging in banking in any form. It is obvious that this did not prohibit the issue of notes by individuals or corporations of less than six persons; nor did it prohibit the operations of banks of deposit by large organizations. This fact was not understood for many years, however, and, with the exception of small institutions, the Bank of England enjoyed a monopoly of the entire field of banking. The effect of this monopoly was not felt at first, but with the general development of commerce which took place in the latter part of the eighteenth century a demand for credit instruments appeared which the Bank of England could not meet. There sprang up, accordingly, a great number of small weak banks, whose notes soon flooded the country. They were issued for the most part in small amounts, and in 1777 a successful attempt was made to drive them out of circulation by prohibiting the issue of notes in denominations smaller than £5.

127. *Development of the use of checks.*—Mr. Conant, in his "History of Modern Banks of Issue," says:

> The prohibition upon note issues was probably one of the causes which contributed to the use of checks. The notes issued by private bankers were at first written on paper for any odd sums like promissory notes. The practice was introduced by Child and Company in 1729 of having the notes partly printed and partly written, like a modern check. These notes

continued to be issued till about 1793, when the existing system of giving the depositor a credit for the full amount of his deposit and authorizing him to draw checks at his convenience against it was introduced. The issue of notes by private bankers was not forbidden until the Bank Act of 1844, but their use gradually diminished as the greater convenience of checks came to be understood.

The intimate relation between the Bank of England and the government, which had been established at the outset, continued as time passed. The charter was renewed from time to time, usually on the condition of additional loans to the government. The war against Napoleon was financed largely by the Bank of England, Mr. Pitt drawing heavily upon the bank for money which was sent to the Continent to finance the war. These drains of specie continued unabated until the bank was forced by Parliament to suspend specie payment in 1797. The suspension, or restriction as it was called, continued until 1821.

During the earlier part of this period the Bank of England was able to keep its notes circulating at par with coin. The act of 1797 had made them legal tender. Finally, however, depreciation began, and during the boom which followed the panic of 1810 assumed considerable proportions. In that year a committee was appointed by Parliament to investigate the financial and monetary situation, and a report known as the Bullion Report was the result. In this report the real evils of the situation were ably expounded, and recommendations made which, if adopted promptly, might have restored the currency to a stable value. It served, however, to educate the minds of bankers and public men to an understanding of the problems involved, an education which bore fruit a few years later.

In 1816 England adopted the gold standard, and in 1821, the bank having already accumulated a large amount of gold, resumption became a fact. At the same time the government's power to borrow from the bank was restricted so that no further loans could be made without special authority from Parliament.

In 1823 it was discovered that the Bank of England had not been given a monopoly of banking except in its note issue function. There followed, accordingly, a movement to establish joint stock banks of deposit. This had little effect, as no banks were immediately established, but it resulted in certain concessions from the Bank of England. In 1826 the bank consented to the establishment of joint stock banks of issue at a distance of more than sixty-five miles from London. In 1833 joint stock banks were authorized in London and vicinity, but they were not given the right of issue.

In 1833 an act was passed by Parliament which made the notes of the Bank of England legal tender as long as they were being redeemed in gold at the bank.

128. *Bank Act of 1844.*—During the decade which followed the authorization of joint stock banks of issue, seventy-two such banks were organized and note issues increased. In 1836 and again in 1839 panics occurred and it was popularly thought that they were caused by an excessive issue of notes. As a result the famous debate over the currency principle as opposed to the banking principle of issue arose.

The advocates of the currency principle won out in Parliament and succeeded in getting their ideas incorporated in the Bank Act of 1844. The charter of the Bank of England was before Parliament for renewal. The new charter provided for the entire separation of the banking and issue departments. The bank

was ordered to deposit with the issue department £14,000,000 of government securities, which represented the average amount of circulation then outstanding. This deposit included the government's debt to the bank, which amounted to £11,015,000. In return the bank received an equivalent amount of notes. Further notes could be issued only after a deposit of gold coin or bullion with the issue department, the right of deposit being open to anyone. Joint stock banks of issue were allowed to continue issuing notes, but if they retired their circulation it could not be reissued. In order that this might not cause a contraction of the currency the Bank of England was given the right to increase its deposit of bonds and to issue notes against them to the amount of two-thirds of the circulation retired by the joint stock banks.

Under the operation of this plan the amount of notes issued against securities has increased to £18,400,000. In 1908 there were fourteen joint stock banks which retained the right of issue and had outstanding slightly over £900,000 of notes. At the same time, there was in circulation about £480,000 of notes which were put out by private banks.

129. *Character of the Bank of England note.*—By this Act the character of the bank note was changed entirely. Formerly it had been a credit instrument, depending for its redemption upon the bank's reserve and general assets—the bonds, notes, etc.—for which it had been exchanged. Its volume expanded and contracted with the demand for a medium of exchange. The Bank Act converted it into a gold certificate—a warehouse receipt for gold—destroying entirely its character as a real bank note. Its volume can expand now only after a deposit of an equivalent amount of gold; hence the

only economy the system attains is in the greater convenience of paper money. England's currency supply is extremely inelastic, varying only with the supply of gold which is left in the country by the movement of foreign trade.

The Bank Act was followed by a considerable increase of deposit banking. Hence this inelasticity was not felt until the panic of 1847. In that year, and again in the panics of 1857 and 1866, the demand on the bank for notes was so great that the government suspended the Bank Act and allowed the bank to issue notes based on its general assets. The rate of interest at which the bank could lend its notes was fixed in 1857 at eight per cent, and in 1866 at ten per cent, and the interest was to be credited to the government's account, so that the bank would not increase its loans unnecessarily with the idea of making large profits for itself. In this suspension system lies the only elasticity of the English plan of note issue. It has had the desired effect in the panics in which it has been used, but because it depends upon the consent of Parliament or an order in council it is a dangerous device to rely upon. There is always the danger that the consent will not be granted in time. At best the bank can use its notes only to check a panic already under way; it cannot well use them as a preventative.

130. *A bankers' bank.*—With the growth of deposit banking, the resultant increase of joint stock banks of deposit and restriction upon note issue, the Bank of England has become chiefly a bankers' bank. It may be said to hold the cash reserves of all England. There are no laws compelling banks to keep cash reserves, the amount of these being left entirely to the judgment of the banks themselves. The banks carry only till

money, their reserves being kept on deposit with the Bank of England. Against these deposits the bank usually carries a reserve of between forty and fifty per cent. The total cash reserve upon which the English credit system is based probably amounts to no more than six per cent. This seems to Americans an amazingly small figure. It is made possible by the commanding position which the Bank of England occupies.

There are in England a number of great institutions which are engaged in making acceptances. We have already seen how profit is made in the acceptance business and of what great benefit a system of acceptances is to a country. When these great acceptance houses and joint stock companies feel a need for cash, they draw on their balances at the Bank of England. If they do not wish to deplete their reserves they take commercial paper to the bank and have it rediscounted. The proceeds are placed to their credit subject to withdrawal.

The Bank of England cannot refuse payment on deposits after they are once made. In order to protect its reserve, then, it raises the discount rate. The banks, finding themselves subjected to a heavier charge when rediscounting, will raise their own discount rates to customers. The effect of this is that only the customers who most need accommodation and who can offer the best paper, are able to borrow. Credit is contracted automatically, imports of merchandise slacken, gold exports drop off and the country is restored to a normal basis. In such a time it would be extremely desirable for the Bank of England to have an elastic issue power. To get this, however, the Bank Act must be suspended.

It is feared by some that the rapid growth of the large joint stock banks will lower the prestige of the

Bank of England. If the bank should cease to be the main reliance of English banks for rediscounting purposes, it would no longer be able to control the general discount rate, and thus to contract credit and check gold exports, single handed. A general agreement among the larger banks would be necessary and this might be prevented at times through competition and jealousy. Action certainly could not be taken as promptly as at present. It is thought that an elastic note issue power would materially increase the prestige of the bank. As it is, the bank's rate is carefully watched the world over as a barometer of trade. If the rate is lowered, it means that reserves which it is anxious to lend are piled up in the bank; if it is raised, it indicates that the bank is attempting to contract credit and build up its reserves.

131. *A private institution.*—The Bank of England has always remained a private institution, bent upon earning profits for its stockholders. In the early days it became hopelessly tangled in government affairs through its loans. It did not dare refuse the demands of the government for fear that the latter would repudiate its debt. It still greatly assists the fiscal operations of the government by managing the public debt, receiving government revenues, and making various payments. But over these functions the government has no direct control except when its contracts with the bank expire.

The directors of the bank are elected by the stockholders and may not be "bankers" in the English sense of the term, that is, lenders of money for short terms on commercial paper. But this rule does not exclude the great financiers who are engaged in other branches of the banking business. The twenty-four directors elect a governor and a deputy governor for a term of

one year. Usually the senior director, who has not already served, is made governor and the next in seniority, deputy governor. It is usually about twenty years from the time of a man's entry upon the board of directors until he is reached in his turn as governor. The board meets every Thursday in the historic "bank parlor" to pass upon the reports for the week.

Although run for profit, the bank has been managed in the interests of the whole country, and its management has been so efficient and unselfish that many people are under the impression that it is a government institution. In general it has been found best that the great central banks should be managed by the government or at least that the government should have the right to determine the general policy of the bank.

132. *Banking in France.*—The earliest attempt to establish a central bank of issue in France was made by John Law in 1716. The bank was well conceived and for a time was ably managed, but it finally became involved with Law's speculative schemes and went into liquidation in 1721. The panic which marked the end of Law's career was so severe that for fifty years there was no further attempt to establish a great national bank. In 1776 the Bank of Commercial Discount was organized only to receive its death blow at the hands of the government in 1789. During its brief existence it was well managed and gave excellent service. The government, however, found that its own credit was unstable, and in an effort to repair it, dragged the bank down with it. The climax occurred when the government ordered the bank to pay into the treasury a large sum in notes in return for worthless assignats. In 1793 the bank was suppressed by a decree of the National Convention. The Reign of Terror followed.

133. *Bank of France.*—The Bank of Franee was founded by Napoleon in 1800 with a capital of 30,000,000 francs. At the outset it had no special privileges with regard to the issue of notes, nor was it a government institution in any sense. In 1803 the capital was raised to 45,000,000 francs, and it was given the exclusive right of issue in Paris. In 1806 the capital was further increased to 90,000,000 francs and the present system of government was adopted.

Under this system a governor and two deputy governors are appointed by the head of the state. These officials must be stockholders. There is also a board of fifteen regents chosen by the stockholders, but the governor presides over this board and has general supervision of the loans and all bank affairs. The government has never been a shareholder in the bank.

In 1808 the bank was given exclusive right of note issue in all towns in which it had branches. During the years following the fall of Napoleon its influence waned somewhat in favor of the establishment of departmental banks. A large number of these were established between 1830 and 1840 as the result of the belief that the Bank of France was not properly organized to administer the banking affairs of the average citizen. It was popularly believed to be a bankers' bank. The growth of the departmental banks soon resulted in a spirited contest with the Bank of France, the main point at issue being whether the privilege of note issue should be confined to the one bank or bestowed upon all. The final result was the Act of 1848 which gave to the Bank of France a monopoly of the note issue function. It was required, however, that the bank should buy out the departmental banks of issue, which it promptly did by increasing its own capital stock.

The bank is required to maintain one branch in every department in France. Each branch is allotted a certain amount of the capital, and the law requires that half the capital shall be held locally. The total capital, in 1914, was 180,000,000 francs, or, approximately, $36,000,000. Loans are made at the branches as well as at the central institution, and at the same rate of interest. It is worthy of note that the bank often lends in very small sums, running down to a few francs.

134. *An elastic currency.*—The monopoly of note issue did not result in a wide use of checks as it did in England. The reason for this lies largely in the fact that the bank's note issue is elastic. Notes are issued according to the banking principle, that is, against the general assets of the bank. An upper limit is set by the government, but it is raised whenever there appears any likelihood of its being reached. The limit has, therefore, never been effective. No reserve is required by law, but the bank actually carries against its circulation a reserve of about seventy per cent in gold and silver, both of which are legal tender in France. The bank pays a tax equal to one-eighth of the discount rate, on all liabilities in excess of its specie reserve.

The French people make small use of checks. Even in Paris large payments are made in notes of the Bank of France. France has thus neglected the check side of banking; England, the note circulation side. As a result, France suffers from inconvenience, while England is more subject to panic.

135. *Governmental control.*—Since the Bank of France is under the control of officials appointed by the government, it has always been managed with a view to promoting the welfare of the country at large. Since the governor and deputy governor are stockhold-

ers, it is to their interest, also, to see that the bank makes profits. This, however, has been a secondary object.

186. *Meeting a crisis.*—In a time of crisis the Bank of France can raise the discount rate just as the Bank of England does. There are banks in France engaged in the discount and acceptance business. When they need cash, they take commercial paper to the Bank of France and have it rediscounted. In return they get notes of the bank instead of leaving the proceeds on deposit as is done in England. In this elasticity of note issue the Bank of France has an advantage over the Bank of England. As long as it is confident that the paper is good it can continue to rediscount and pay out notes. Of course, there is a natural limit to this process. As soon as the currency supply begins to be excessive, prices rise, imports increase and gold begins to flow out of the country. When gold begins to leave the country, the bank knows that credit is over-expanded and takes measures to force contraction.

The bank has two ways of protecting its gold reserve. It can raise the discount rate; but this is a last resort. As a rule the discount rate is steady, even when the rates of the Bank of England and of the Bank of Germany are fluctuating. The rate is also generally lower. The second method which the bank has of protecting its gold reserve is to charge a premium on gold. It will be remembered that both gold and silver are legal tender in France. If the bank has reason to believe that gold is wanted for export purposes it may exercise the option of redeeming its notes in silver or it may charge a premium on gold if noteholders insist on having it. If the premium is made too great people will go to the extent of collecting gold throughout the country. Gold will be exported anyhow, but the fear that the bank

will charge a premium does place a check on credit inflation. It may be pointed out that the policy of charging a premium does not keep the total gold supply of France from being drawn down, although it may protect the bank's own reserve. But since the reserve when in the bank is in a position to be more effectively used, the bank's reserve, rather than the general gold supply of the country, should be protected. The raising of the discount rate is the most effective check.

187. *Suspension of specie payment.*—The Bank of France has twice been forced to suspend specie payment. In the revolution of 1848 the bank suspended and its notes were made legal tender, but it was ready to resume at the end of three months. The government, however, forbade resumption until 1850, at which time the legal tender provision was repealed.

The bank suspended again in 1870, at the beginning of the Franco-Prussian War, and its notes were again made legal tender. The bank at that time held specie nearly equal in amount to its outstanding notes, and equal to about seventy-five per cent of all of demand liabilities. It was in a position to meet a run, in addition to making the usual loans to the community and the necessary loans to the government. The people thought, however, that specie was flowing into Prussia and so demanded suspension. Even after suspension the notes never fell more than four per cent below par. Specie payments were resumed in 1878. The Bank of France guaranteed the Morgan loan of 250,000,000 francs in 1870 and later made it possible for the government to pay the $1,000,000,000 indemnity to Germany at a time when the country was still smoking from the fires of a disastrous war. Through her excellent credit system, France, though defeated in war, kept her com-

merce moving in 1873 when victorious Germany was suffering from a severe panic.

138. *Imperial Bank of Germany.*—The Imperial Bank of Germany, or Reichsbank, was organized upon the foundations of the Bank of Prussia in 1875. Its organization was one of the measures adopted by Bismarck to bring order out of the monetary chaos that had existed in the German states prior to the unification of the Empire. Before the establishment of the Imperial Bank there had been five different currency systems in the Germanic Confederation, with a heterogeneous coinage, a variety of state bank notes circulating at varying rates of discount, and a sprinkling of legal tender paper put out by the various state governments. Part of the stock in the Bank of Prussia was owned by the Prussian government. This was bought by the German Empire and resold to private subscribers. The Imperial Bank is privately owned.

In 1873, Germany adopted the gold standard. The successful passing to the gold standard and the remarkable success of the Imperial Bank at the very beginning can be largely attributed to the $1,000,000,000 indemnity which Germany received after the Franco-Prussian War. About one-quarter of this was paid in gold, and a great part of the remainder consisted of exchange on London, which was payable in gold.

139. *Government control.*—The bank is controlled by the government through an official board of curators, composed of the Chancellor of the Empire, who is president, and four other members, one named by the Emperor and three by the Federal Council. The administrative authority is vested in a board of directors who are selected for life by the Emperor from a list submitted by the Federal Council. The officers of the

bank, though paid from the funds of the bank, are considered government employés and are forbidden to hold stock. The influence of private owners is exerted through a central commission of fifteen members, elected by the shareholders, from among themselves. This commission directs many of the details of the bank so long as their course does not conflict with the general policy of those above them. Three of the commission are charged with the daily supervision of the bank's affairs and they may sit at all meetings of the directorate with consulting powers.

The profits of the Reichsbank are divided as follows: three and one-half per cent on the capital stock to the shareholders, ten per cent of the excess to surplus, three-fourths of the remainder to the government and the other fourth to the shareholders.

140. *Note issue.*—The note issue of the Imperial Bank is modelled somewhat on the English Bank Act of 1844. When the Act of 1875 was passed, there were thirty-two independent banks of issue in the Empire. They were allowed to issue in the aggregate, 135,000,000 marks and the Reichsbank 250,000,000 marks of notes uncovered by gold. It was provided that if any of the independent banks should for any reason retire its circulation, its right of issue should pass to the Reichsbank. By 1908 all but four of the banks had given up the right of issue, and they had an authorized circulation of only 68,771,000 marks. The uncovered issue of the Reichsbank had at that time risen to nearly 473,000,000 marks, which is called the "contingent circulation." Imperial Bank notes are legal tender and are issued in denominations as low as 20 marks ($5).

The German law, like that of England, requires that

for all issues above the contingent circulation, the bank shall hold an equal amount of cash in its reserve; but the fund is not sequestered and held against notes alone as in the case of the Bank of England. Nor is the rule inflexible like the English law. Any bank may exceed the limit of cash reserve by paying a tax of five per cent on the surplus issue, provided that the Reichsbank maintains a reserve equal to one-third of its circulation, the other two-thirds to be covered by three-name paper having not over ninety days to run.

The management of the bank has, at times, lent notes under this provision at a rate of interest lower than the tax rate, thus imposing a loss on the bank for the good of the community. While a tax on circulation is not generally considered as good as the tax on deficiency in reserves, this provision does give to the note issue a certain degree of elasticity which makes it superior to that of the Bank of England.

141. *The Giro system.*—One of the most important services rendered by the Imperial Bank is the transfer of deposits on current account. The Reichsbank has hundreds of branches scattered throughout the Empire. By the Giro system a person in any town where there is a branch of the bank, wishing to make a payment to some one in another town, may pay the amount into the local branch of the bank and it will be credited the following day to the person in whose favor it is deposited. No charge is made for the transfer and the person making the payment need not have an account with the bank. The system results in an enormous economy in the use of specie. It may be compared in some respects to the American clearing house and operates as a kind of substitute for our check system.

142. *Control over the money market.*—The Reichs-

bank does not hesitate to vary the discount rate in order to control the money market. In addition to this method, the bank has two other ways of giving flexibility to its resources and checking sudden movements of gold. One of these is the accumulation of foreign bills, especially those drawn on England, in its portfolio. When exchange approaches the gold export point the bank sells these abroad and relieves the tension.

The other measure is also practiced by the Bank of England and is called "borrowing from the market." This process consists of offering treasury bills for discount in the market, thereby absorbing surplus cash and preventing a too rapid fall in the open market rate of discount. Both of these processes need to be administered with care. An unskilled employment of the power at the wrong time may have disastrous effects.

The most notable tendency in late German banking has been the tendency of the great discount and acceptance houses to combine. Early in 1914 two banks combined with a joint capital of $75,000,000; and there was one bank already in existence which had a capital as large. This is regarded as an important development in the direction of the increased influence of the Berlin money market.

143. *Other European systems.*—Lack of space does not permit a description of all the banking systems of Europe. The three great systems just described may be taken as representative. Scotland has an excellent system with some unique features, but most of these are also found in the Canadian system which is described in a following chapter. In general it may be said that the European countries have seen the advantages of having a strong central institution capable of controlling the money market in the interest of the community.

For the most part, the great European banks are privately owned but controlled by the government, the Bank of England being the notable exception to the rule of public control. The use of rediscounts and acceptances is one of the features most worthy of imitation. The German Giro system indicates, in a way, the enormous advantages to be gained in America by a sensible extension of the clearing house principle.

CHAPTER XIII

CANADIAN BANKING SYSTEM

144. *The banks and the government.*—The banking system of the Dominion of Canada is so often held up by the advocates of asset currency and branch banking as a model for the United States to follow that it is well to understand thoroughly the details of the system.

The Canadian system, in 1914, was composed of twenty-four large joint stock commercial and industrial banks, privately owned and managed, but working under a uniform law. No bank is chartered with a capital of less than $500,000, one-half of which must be paid in before business is begun. It is difficult, therefore, for new banks, unless they are sure of a great volume of business from the start, to be established. The banks have about 3,000 branches, scattered over the Dominion, with a few outside of the country. Banking is extended, not by establishing new banks, but by increasing the number of branches, together with the capital and surplus of the parent banks. The Canadian Banking Act is revised every ten years, at which time all charters are renewed with such changes as may seem desirable. The last Bank Act was passed in 1913 and one or two important changes were made. The tendency during recent years has been toward consolidation.

145. *Note issue.*—The banks have the exclusive privilege of issuing bank notes, the denominations being $5 and multiples thereof. These are not legal tender. One, two and four dollar bills are provided by the govern-

ment. Canada has also a government twenty-five cent scrip.

The greatest virtue of the Canadian bank note currency is elasticity. It adapts itself easily to the needs of business. Any bank may issue notes in exchange for commercial paper, or any proper banking asset, up to the amount of its capital stock. Canada is an agricultural country and is subject to the same seasonal fluctuations in the need for currency as are experienced in the United States.

At times the limitation of the total volume of notes to the amount of capital stock has been found embarrassing. Accordingly the Bank Act was amended in 1908 so as to permit the issue of an emergency circulation in excess of the capital during the crop-moving season (October 1 to January 31). This emergency circulation is subject to a tax of not more than five per cent, and cannot in amount exceed fifteen per cent of a bank's combined capital and surplus.

On the thirty-first day of July, 1913, the paid up capital of Canadian banks amounted to slightly over $116,500,000. This was the upper limit of the ordinary circulation. The total surplus was nearly $109,000,000. Fifteen per cent of capital and surplus would allow for an emergency issue of slightly over $33,800,000. The largest amount of circulation outstanding at any time during the month of July was slightly over $108,000,000. No emergency circulation could be issued during the summer. In November, 1912, the emergency circulation actually approached $10,000,000 at a time when the fifteen per cent limit was somewhat over thirty-three million dollars. The comparatively small margin alarmed the bankers and a movement was inaugurated to secure still greater elasticity.

Accordingly the Bank Act of 1913 made provision for the establishment of a central gold reserve. A bank may now deposit any amount of gold or legal tender in the central reserve and issue an equal amount of notes. This provision gives an additional elasticity, as the banks are expected to keep a considerable part of their gold and legal tender reserves in the central reserve. As no special reserve in the bank's own vaults is required by law, this works no hardship.

The Canadian Bankers' Association, with the approval of the minister of finance, appoints three trustees, and the minister a fourth, to have charge of the central reserve. The association also, under the power given it under the Act, makes the by-laws and regulations respecting the custody and management of the reserve, which is in charge of the trustees in Montreal, Canada's financial center.

Canadian bank notes now have a rare degree of elasticity. The notes are contracted by a system of clearings. No bank, except on rare occasions, ever pays out the notes of a rival institution. These, together with other claims, are regularly sent through the clearing house where one exists, or returned directly to a branch of the issuing bank where there are no clearing facilities. This insures the retirement of every bank note as soon as its work is done. It acts as a continual test of the solvency of the issuing bank and is, perhaps, the chief source of the high credit which Canadian bank notes enjoy.

146. *Security of bank notes.*—We have just mentioned the chief factor which gives Canadian bank notes their general acceptability. The ultimate security rests, first, on the double liability of the shareholders; second, on the prior lien which noteholders have on the assets

of a failed bank; third, on the bank circulation redemption fund; and fourth, on a provision for the payment of five per cent interest on the notes of failed banks from the date of refusal to redeem to the date when readiness to redeem is announced. The last provision actually makes the notes of a failed bank much sought after by other banks, and the ordinary individual is rarely able to obtain them.

The bank circulation redemption fund is held by the minister of finance and draws three per cent interest. It is maintained out of contributions by the banks and must always equal five per cent of their average monthly circulation. It is especially set apart for the payment of the notes of failed banks. If the fund becomes impaired the banks must contribute annually to its recoupment a sum not exceeding one per cent of their circulation of the preceding year.

Regarding redemption the law requires that the banks shall make such arrangements as are necessary to insure the circulation at par in every part of the country of all notes issued. To this end each bank is required to establish redemption agencies in at least one city of each province.

The Canadian law makes no requirements of the banks for the keeping of a minimum reserve. The question is one which has excited wide discussion in Canada, but the weight of the argument seems to be on the side of those who think that a reserve requirement does more injury than benefit to the community. A reserve which cannot be used is of no avail in emergencies. Business prudence has in fact led the Canadian banks to maintain adequate reserves, and they have been able to lend funds in the United States when our banks have been paralyzed.

147. *Branch banking.*—The advantages of branch banking are:

1. Large capital behind each institution. No matter how small the branch the customers share in the security which a large capital offers.

2. Unity of policy on the part of the leading banks during a stringency, in contrast to the playing at cross purposes which, in the panic of 1893, distinguished the action of the national banks in the central reserve cities of the United States against the smaller country banks. In 1907, if the country banks had been branches of the large city banks, they would not have withdrawn funds from those banks when they were so badly needed, and the crisis would not have been so severe.

3. Power to equip every branch with ample reserves for maintaining commercial credit by means of note issues. It is impossible in Canada for the business needs of any community, no matter how remote, to outstrip the banking facilities, as is often case with us. The resources of the branch bank are quickly and indefinitely extended. Moreover, when the need for additional facilities has passed, the business of the bank can contract accordingly without loss to anyone.

4. Uniformity of interest rates throughout the whole country which do not vary more than one or two per cent between the large cities in the East and the newer towns and rapidly expanding cities of the West. In the absence of competition the necessity of depending upon small local banks for accommodation requires the business men of western towns in the United States to pay monopoly rates for the use of capital.

5. Expert supervision by the central office prevents bad banking. The boards of directors of the large banks are responsible for all the branches and they are there-

fore forced to put into practice a method of examination and supervision which is much more effective than government examination in the United States.

6. Branches can be maintained in localities where the profit of the business would not justify the establishment of a separate bank with independent capital. The city banks can establish branches without any investment in additional capital. Branches can be established where the business is so small as to justify simply the employment of a few clerks in a rented office.

It is sometimes objected that the managers sent out from a central institution are not sympathetic with local conditions. This disadvantage is more than offset by the advantages just enumerated.

148. *Canadian system in actual operation.*—We turn now to the manner in which all this machinery is applied to moving the crops. The *Bankers' Magazine* for June, 1906, contains the following description:

The greatest grain-producing district of Canada is the far inland section which forms the Provinces of Manitoba, Saskatchewan, and Alberta. The larger part of the Canadian crop finds a market abroad and has to be transported to the Atlantic seaboard. In the case of grain grown in Ontario or the eastern provinces this is not a difficult matter, for the distance is shorter and the means of communication numerous. But between the provinces we have mentioned and the seaboard the only links of communication are one or two vast stretches of single-track railroad supplemented by water communication from the head of the Great Lakes. But navigation usually closes in these northern waters during November, and the period between the harvesting of the crop and the close of navigation, after allowance is made for the time consumed in threshing and marketing the grain, is all too short. Hence the rush to ship which takes place in the fall of each year, and

hence, too, the immense storage elevators which have sprung up at the lake ports of Port Arthur and Fort William at the head of navigation. Once these water outlets are closed there is nothing left but the long and expensive railroad haul.

149. *Moving the crops.*—Long before the movement of the crops is due the banks make arrangements to accumulate large supplies of notes at convenient points, Winnipeg being naturally the chief center for this purpose. It is at Winnipeg that the large milling and elevator companies which handle most of the grain crops have their headquarters, and it is the Winnipeg branches of the banks which are most conveniently situated to replenish the tills of the country branches and to provide funds for the country storekeepers who cash the grain tickets issued by the wheat buyers. Scattered along the railroad lines in the west at the little way-stations are the tall buildings of the grain elevators, and here are to be found the buyers for the Winnipeg grain firms. To these the farmer brings his wheat, receives a voucher called a grain ticket specifying the weight of the grain he has sold and the price to be paid for it. These tickets are cashed at the local banks or, if there is no bank, by the country storekeepers, arrangements for supplying the latter with notes for this purpose having been made by the companies in Winnipeg. Checks are seldom used in transactions of this kind with the farming community. At this season of the year the business of a country branch bank even in very small places will be very active, and large sums are daily paid out over the counters.

150. *Grain as security.*—The Canadian banks are specially empowered under the Bank Act to acquire warehouse receipts and bills of lading as collateral security and to lend money to wholesale shippers of, purchasers of, or dealers in agricultural products upon the security of such products. So the banks readily make advances to the grain dealers on the security of the grain in their possession. Then when it is shipped by the wholesale dealer the advances are retired by drafts on the

purchasers with bills of lading attached. If the grain is to be exported the bill of lading is usually replaced at the port of shipment by an ocean bill of lading, which is in its turn attached to a bill of exchange on the foreign dealer. This exchange is then purchased by the bank, the previous drafts having been retired, and forwarded to its correspondents abroad. The bank finally receives credit for the proceeds in London or some other European center.

By this time the bank notes originally issued for the purchase of grain have come in for redemption, and the issuing bank, to obtain funds to meet its clearing-house settlements, will be forced to sell sterling or New York funds or else to import gold. As the balance of trade between Canada and the United States, most of which is finally discharged in New York, is against Canada, there is a fairly steady demand for New York funds in the financial centers, and there will usually be found some bank willing to buy. But as the proceeds of the grain shipments are still in Europe, the selling bank will provide cover for its drawings on New York by selling sterling or other foreign exchange on that market against the credit balances acquired abroad by means of the bills of exchange drawn against the shipments of the very grain for the purchase of which in the first place its notes were issued. If gold is imported the resulting transactions are very similar, as New York is the point from which it is usually obtained. In this connection it is interesting to note that some of the Canadian banks are among the largest dealers in foreign exchange in New York, where the credit of their bills is unexcelled. So extensive are these foreign transactions that several of the Canadian banks maintain their own offices in New York, and even in London, for the purpose of looking after their own interests at these points.

151. *Fluctuations in note circulation.*—We have now traced the series of transactions involved in the issue of bank notes for the purchase of grain up to the redemption of these notes in Canada and the final liquidation of

the whole matter in New York and London. Bearing in mind what has been said as to the shortness of the season for marketing the grain of the vast fields of the West, it will be readily understood that tremendous fluctuations in the volume of the bank note currency take place in the course of a short period. The redemption of the notes issued to pay for the crops is completed in January of each year, and this month marks the lowest level of the year. There is a second slight dip during the spring and a third culminating about midsummer.

For thirty years prior to 1896 the lowest point of the year had been reached regularly in May or June, but since that date it has with equal regularity been transferred to January. In 1912, for instance, the volume of bank note circulation amounted to $88,000,000 in February, to $93,000,000 in May, and to $119,000,000 in November.

January is a month usually marked by a lull in business. The holiday trade is over, winter has set in steadily, and some outdoor occupations are suspended for a time, while the majority of business men, in both wholesale and retail trade, are taking stock. As winter wears on business becomes much more active and the note circulation rises for a time, to experience a slight fall in the early spring when many factories shut down for repairs, lumber camps close and the men are discharged, and other winter employments come to an end. It resumes the upward course as summer occupations begin again, navigation on the Great Lakes reopens, and general business gets into full swing. Midsummer brings a slight falling off, as might be expected, but soon the heavier movement of farm produce begins and the note circulation at once responds. The rise is somewhat gradual

at first, but as cattle buyers, owners of cheese factories, and finally grain buyers look to the banks for notes with which to pay the farmers, it increases in velocity. Now the volume of the circulation begins to mount by leaps and bounds, reaching its height at the end of October or the beginning of November, when every nerve is being strained to hurry as much as possible of the western crop to market and to the seaboard before navigation closes on the inland waterways. The period of rapid expansion covers the three months, August, September, and October, and probably part of November. The exact figures are only available at the end of each month. During this period the increase in volume has ranged of late years from twenty per cent to thirty-five per cent, according to the size of the crop to be marketed. A period of contraction, even a little more rapid than the expansion, now follows and lasts till the end of January, when the lowest level of the next year is reached.

152. *The line of credit.*—The large capital of the Canadian banks, averaging over $4,000,000 each, enables them, singly, to take care of almost any business that can come to them. In fact, the practice is to discourage a man from doing business with more than one bank. In the United States a man may not be able to borrow all that he needs from one bank, but may have to go to several. This sometimes results in his borrowing more than he can repay, without any one of the creditor banks knowing that he has overstepped the limits of safety. In Canada a man is supposed to stick to one bank until he has a good reason for changing, such as removal to another locality where his bank does not have a branch. One bank will not accept the customer of another until it is satisfied that he has a good reason for making the change.

The bank, on its part, is able to assure the customer that he will be able to borrow all that his business justifies. What the bank does is to extend a line of credit, as the practice is called. At the beginning of the season the customer estimates about how much accommodation he will need to carry him through. He talks this over with his banker and if his calculations seem reasonable and conservative the bank will agree to advance that amount to him as he needs it in the course of business. The amount is placed to his credit at the bank and he checks on it as he needs funds. Interest is paid only on the sum which is actually drawn out. As the customer checks on his account, he sends in to the bank collateral security in the form of warehouse receipts, bills of lading, and the other documents that are ordinarily obtained in the course of trade. The customer has the great advantage of beginning the season with the knowledge that he can secure the credit that he needs. With this knowledge he can go about his business without worry.

Operation of the system develops an intimate relationship of sympathy and confidence between the banker and the business man to the great advantage of both. The Scotch have a similar system which they call "cash credits."

153. *Bank examinations.*—There is no government supervision of banking in Canada. This is surprising when we consider the elaborate system of reports and official inspection that has been developed just across the border. The idea of independence of government control is handed down from the Scotch system after which the Canadian system was patterned in many respects. At various times proposals for government supervision have been brought before Parliament only to

be voted down by sympathizers of the banks. It is argued that government inspectors could not ascertain accurately the real character of banking assets, and that the fact of government inspection would mislead the public into a confidence that might prove to be misplaced.

The large banks have excellent systems of supervision of their own and their examiners are equal in rank to the managers of the branches, a point which has certain advantages.

The Canadian Bankers' Association was organized in 1892 as a private voluntary association. Eight years later the organization was incorporated and given power to regulate the issue of the union banks. It has powers of inspection so far as circulation goes but cannot look into the loans of the banks. The Canadian system is often criticized because of the lack of any adequate inspection of the parent banks.

154. *Shareholders' audit.*—The Bank Act of 1913 provides for a shareholders' audit. At each general meeting the shareholders appoint auditors from a list of not less than forty names selected by the general managers, subject to the approval of the minister of finance. These auditors have general access to the affairs of the banks and make reports to the stockholders annually or whenever required. Not much is expected of this scheme in ordinary times, but, in case a bank's officials become corrupt or involved in speculation, it will be a useful check. The one weakness of the Canadian system has been the lack of outside examination.

CHAPTER XIV

THE NATIONAL BANKING SYSTEM

155. *The National Banking Act.*—The establishlishment of the national banking system was the result of the unsatisfactory financial conditions which obtained during the Civil War. The currency of the country was composed largely of the notes of over 1,500 state banks. A large amount of it was worthless and almost all of it circulated only at a discount when it was at a distance from its place of redemption. In addition to this currency trouble the fiscal situation of the government was unsatisfactory. It had been forced because of the absence of a market for its bonds to raise money by the issue of legal tender notes. These notes, not being redeemed, impaired the credit of the government. Consequently it was anxious, if possible, to strengthen the market for bonds. Secretary Chase's plan for the establishment of the national banking system commended itself because it would correct in a measure both of these ills. In Secretary Chase's words the principal features of the plan were:

> First, a circulation of notes bearing a common impression, and authenticated by a common authority; second, the redemption of these notes by the associations and institutions to which they may be delivered for issue; and, third, the security of that redemption by the pledge of United States stocks, and an adequate provision of specie.
>
> In this plan the people in their ordinary business would find the advantages of uniformity in currency; of uniformity in se-

curity; of effectual safeguard, if effectual safeguard is possible, against depreciation, and of protection from losses in discounts and exchanges; while in the operations of the government, the people would find the further advantages of a large demand for government securities, and of increased facilities for obtaining the loans required by the war.

156. *Market for United States bonds.*—The chief feature of the plan was the requirement that all banks which desired to incorporate under the national law should buy government bonds, deposit them with the Treasury and receive circulating notes to the amount of 90 per cent of their bond deposits. Thus these notes would be uniform because they were all to be printed by the government, and they would always be secure because the deposited bonds were pledged to their redemption. Furthermore, a new demand for government bonds would result which would increase the nation's borrowing power.

157. *Early history of the Act.*—This plan was recommended by Secretary Chase as early as 1861, but it was not until 1863 that it became a law. It did not, however, result in as great a benefit to the national finances as has been expected. There was a decided prejudice against the issue of notes secured by the deposit of bonds, the result of the failure of the several state systems which operated on that plan. Furthermore, the original Act was defective in many respects. The state banks, a majority of which had been expected to incorporate under the new law, did not do so in any large numbers; therefore, there was no great demand for government bonds.

In 1864 the law was amended making the conditions of incorporation somewhat more attractive, but it was not until 1865, when a law was passed providing for a

tax of 10 per cent on all notes issued by state banks, that conversion of state into national banks became general. By this provision all state banks which wished to use notes were forced into the new system. Thus the demand for bonds did not come until the war was over and the necessity of their immediate sale had disappeared.

This National Banking Act, its operations perfected by various amendments in 1874, 1875, and 1882, became the backbone of our banking system. Its provisions, therefore, are worthy of careful attention.

158. *Comptroller of the Currency.*—Control of the national banking system was vested in a bureau of the United States Treasury under the direction of the Comptroller of the Currency. It was the function of this department to supervise the issue and redemption of notes, the granting of charters, and to enforce all the various provisions of the law. To accomplish this end, examiners were appointed by the comptroller, whose duty is was to examine from time to time the affairs of each bank in the system. These examinations were made at any time the comptroller selected and without previous notice to the bank. The examiner had access to all the books and accounts of the bank, and was required to make a thorough investigation of all the loans outstanding. This examination was reported in detail to the comptroller, who called the bank to account for any illegal practices or situations which might exist. Once a year the comptroller made a report to Congress showing the condition of the banks in detail. In case of the failure of a bank a receiver was appointed by the comptroller.

159. *Summary of the National Banking Act.*—Charters were granted for periods not longer than

twenty years. Application had to be made by not fewer than five persons, with whose good character the comptroller was satisfied. Fifty per cent of the capital was required to be paid in before the bank could open, and the remainder within six months. The minimum capital for cities of 3,000 population or less was $25,000; for cities between 3,000 and 6,000, $50,000; for those between 6,000 and 50,000, $100,000; and for those greater than 50,000, $200,000.

Each bank had to have a board of directors of not less than five members, each of whom was required to own at least ten shares of stock. The stockholders were individually liable for all obligations of the bank up to an amount equal to their holdings of stock. In case of failure they could be assessed to pay deposits.

The technical powers of national banks were briefly as follows: (1) to receive deposits, (2) to issue notes, (3) to lend credit on personal security, and (4) to discount notes and other evidences of debt. A bank might own only such real estate as was necessary for conducting its business and as came into its possession in settlement of previously contracted debts. In the latter case it had to be sold within five years. A bank could not lend more than one-tenth of its capital and surplus to one individual or corporation.

Before a national bank could open it was required to deposit with the United States Treasury a certain amount of government bonds. This amount varied with the capitalization of the bank. For banks with a capital of $200,000 or less, the requirement was one-fourth of its capital; for those over $200,000 it was $50,000. This amount had to be deposited regardless of whether or not the bank expected to issue notes. It was entitled, however, if it desired, to receive from the comptroller

circulating notes equal in amount to the par value of the deposited bonds. These notes were "receivable at par in all parts of the United States in payment of all taxes and excises, and all other dues to the United States except duties on imports; and also for all salaries and other debts and demands owing by the United States to individuals, corporations and associations within the United States except interest on the public debt." They were also legal tender in payment of any debts to national banks.

160. *Circulating notes.*—The notes were redeemable on demand in lawful money at the counter of the issuing bank; and to further facilitate redemption each bank was required to deposit with the treasury an amount equal to five per cent of its outstanding circulation. When notes were presented to the government they were redeemed out of this fund. Circulation might be retired by redeeming the notes over the bank's counter and sending them to Washington for cancellation, or by depositing money to an equal amount in the treasury. The deposited bonds were then freed. The law restricted redemption, however, by providing that not more than $9,000,000 of national bank notes might be retired in any one month. The notes were subject to taxation by the government. When they were secured by the two per cent bonds, the banks had to pay one-half of one per cent annually on the average circulation; when secured by higher rate bonds the tax was one per cent annually. The expense of redemption was also borne by the banks. It is estimated that it amounted to about $63 for each $100,000 of circulation.

There were in 1913, 7,473 national banks, with a total note circulation of $722,125,024. To secure this circu-

lation the banks had purchased and deposited with the treasury $735,226,870 of government bonds. A majority of these bonds bore only two per cent interest, the lowest rate paid by any nation in the world. Thus the prediction that the law would create a market for government bonds was fulfilled. The second reason for the adoption of the law—that it would provide a uniform currency—was likewise accomplished, for national bank notes have always circulated freely and without discount. The note of a Maine bank was as acceptable in California as that of a San Francisco bank.

The danger of the system was in the price that was paid for these benefits. In making the currency stable and uniform it was made inflexible; and in requiring a deposit of government bonds a system was founded which necessitated a continuance of the national debt.

161. *Reserve requirements.*—All banks were required to keep a certain amount of lawful money on hand as reserve. In New York, Chicago, and St. Louis —designated central reserve cities—this amount was twenty-five per cent of the deposits. In certain other cities, called reserve cities, the amount was twenty-five per cent, but one-half of this might consist of demand deposits in New York, Chicago, or St. Louis. All other banks were required to keep a reserve of fifteen per cent, three-fifths of which might be deposited in the reserve cities. The five per cent redemption fund might be counted as a part of the reserve. The enforcement of this reserve provision was a duty of the bank examiner and the Comptroller of the Currency.

162. *The development of bank deposit currency.*—The history of banking in the United States since the establishment of the national banking system and the

attendant restrictions upon note issue by the state banks, deals chiefly with the development of the deposit function. The following table shows the increase of deposits relative to capital and note issues in 1913 compared with 1865:

	1865	1913
Capital and surplus and undivided profits	$431,900,000	$2,045,667,546
Deposits	549,100,000	5,953,461,551
Notes	171,000,000	722,125,024

While national banks had increased four and one-half times in number, the capital and surplus nearly five times, and the notes over four times, the deposits had increased over tenfold. In addition to this, moreover, must be counted the $8,000,000,000 of deposits in state banks which issued no notes whatever.

This deposit system gave rise to check circulation—the most perfect currency known, a currency which performs a vast amount of money work at a minimum cost and which expands and contracts during ordinary times with the varying needs of business. To this function the national banking law completely subordinated the issue of notes.

There are parts of the country, particularly the rural districts of the South and West, where banking facilities are poor and where they must use either notes or actual money. Furthermore, at certain times of the year their demand for currency of one form or another increases. It is obviously poor economy to force these districts to use gold in their hand to hand transactions when that gold can perform three times the money work if held in bank reserves as a basis for deposit currency. Whereas the deposit currency will expand to meet the seasonal increases of business in the financial

centers, it does not aid in any way the rural community which needs more actual money. For this, if for no other reason, the subordination of the note issue function prevented the greatest economy in banking.

The great danger of the system, however, lay in the reserve requirements and customs. All banks were permitted to keep a portion of their reserve on deposit in reserve city banks. This permission was incorporated into the law with the idea of enabling the country banker to keep without expense a city account as a basis for exchange. A further reason was to increase the mobility of loanable funds, by enabling the city banker to lend in the large centers the deposits of the country bank. These needs continued to exist as they did in the beginning, but the lending by the city banker of the country banker's deposits was so greatly abused that its dangers became as great as its benefits.

163. *Seasonal demands.*—This abuse grew out of the custom of the country banks of depositing in financial centers not only a portion of their reserve during certain seasons of the year but of a large amount of additional cash. Since competition between the city banks resulted in the payment of interest on country balances, these deposits had to be lent. And since they were demand deposits they had to be lent on demand or call. As the chief field for this sort of loan was in the stock market, the promotion of speculation was the principal function of these country balances.

When the demand for loans as well as for actual money increased in the country, as it invariably does in the late summer, these deposits were withdrawn and shipments of currency requested. Loans had to be sharply contracted in the financial centers. The deposit currency would not meet the need because the demand

was for a circulating medium of general acceptability. Here was a demand, therefore, which under a system of elastic note issue could have been met without shipment of gold, a consequent depletion of reserves and calling of loans.

Perhaps it is well that under our system of reserve deposits we had this check upon speculation, but the desideratum is a system which, by enabling the country banker to increase his own currency supply, will lessen the necessity of keeping cash balances in the cities. This would increase his purchases of commercial paper with funds diverted from the stock market.

164. *Depletion of reserves.*—This danger of depletion of reserves was most acute in times of panic. There was then a general demand for liquidation of all credits, including these deposit credits. Bank "runs" are deplored by all bankers, yet the country banks themselves were the first to withdraw deposits. Each bank was anxious to increase the cash reserve in its own vaults, and this could be done only at the expense of some other bank. As reserves were depleted loans had to be called, and the lending power of the banks was sadly crippled at a time when it was greatly needed. With the calling of loans came falling prices, and if borrowers could not borrow they had to sell their property at great sacrifice. It would not be the function of bank notes to prevent failures of concerns which are over-extended and unhealthy, but the issue of true bank notes at such times would save many solvent firms temporarily in need of funds.

This withdrawal of deposits became so general, both on the part of the individual and the country bank, that during a panic the city banks were forced to refuse the payments of deposits in currency. This was done ille-

gally, of course, but at such times expediency rather than legality is the paramount issue. In this way only could bank reserves be maintained.

A very certain method of obtaining money to increase reserves is the purchase of gold abroad. Gold may always be obtained provided a sufficiently high price is bid for it. The large banks, particularly those in New York, can exchange their interest-earning resources, a large amount of which are standard stocks and bonds, for gold in the markets of the world. Obviously, however, this method is extremely slow and very likely to be expensive, as it may involve the sale of good collateral at sacrifice prices.

165. *Aldrich-Vreeland Act.*—The Aldrich-Vreeland Act of 1908, adopted as a result of the panic of 1907, provided for the issue of an emergency circulation by national banks. Under this law national banks in any community might organize a national banking association, any member of which, with the approval of the association, could issue circulating notes based upon certain specified classes of bonds or commercial paper. The total issue of a bank, however, was not to exceed its capital and surplus. The emergency circulation thus provided for was subject to a tax of five per cent per annum during the first month and to an increasing tax in succeeding months. These notes might be retired without limit by the deposit of legal tender money with the Treasurer of the United States.

This Act was extended by the Federal Reserve Act of June 30, 1915, and the tax rate was lowered. Within six weeks after the outbreak of the European war in 1914 over $250,000,000 of the emergency notes was offered by the Secretary of the Treasury. Primarily they were intended to take the place of lawful money

in circulation with the expectation that the lawful money might be used to strengthen the reserves of national banks. This purpose was realized to a certain extent, but the real demand for emergency currency was soon satisfied and the notes began to flow back into the banks.

166. *Inelasticity.*—Although the aggregate amount of notes outstanding increased four times in the course of forty-five years, the increase had nothing to do with the expansion and contraction of business. A perfect currency must have the attribute of elasticity, that is, not only the ability to expand when necessary but the power to contract automatically when the necessity for expansion is removed. In neither respect did our national bank notes meet this need. The requirement that bonds must be purchased and deposited in advance, made the procedure so slow that oftentimes the notes could not be issued until the demand for them had disappeared. Contraction was even slower because of the restriction that only $9,000,000 in the aggregate might be retired in any one month and of the utter lack of adequate machinery.

As a matter of fact the amount of notes outstanding varied not at all with the business needs of the country but rather with the price of government bonds. Upon this latter and the current commercial rate of interest depended all the profit to be made out of circulation. When bonds were low there was a tendency toward purchasing them and increasing circulation; when they were high the tendency was in the opposite direction. The National City Bank of New York, in one of its monthly circular letters, stated:

> Owing to the fact that the bank must part with more money

to buy the bonds which it will require as a basis for circulation than it will receive back in circulating notes (because of the premium on government bonds) its profits in circulation increase as the average rate of interest in the money market declines; and as average money market rates advance, the profits on circulation decline. This is caused from the fact that it could loan the entire sum which it invests in bonds at the average money market rate, but if it takes out circulation it can only loan an amount equal to the par value of the bonds and loses the interest on the premium.

The higher the market rate of interest the greater was the loss on this premium, hence a smaller profit on circulation. Inasmuch as the rate of interest increases with increased demand for capital, the profit on circulation declined when an increase of notes was most needed. The dependence of the aggregate amount of circulation upon these two influences was never more completely proved than during 1908. Both the price of government bonds and the rate of interest were very low; and in response thereto circulation increased many million dollars.

It is obvious that comprehensive reform was necessary if the nation was to have a currency which would finance economically its business needs and enable it to pass from periods of great activity to quietude without complete paralysis of its economic machinery. The chief defects of the system were decentralization and inelasticity.

167. *Lack of unity in the system.*—In addition to the seven thousand national banks there were a great many more state banks and trust companies, which were not only direct competitors of the national banks but which were governed by different laws and regulations. The result was obviously a mechanism with fifteen thousand

managers, each interested in the welfare of his own institution. A system was needed which would enable the banks to work in unison instead of at cross purposes with each other, and which would render possible the issue and redemption of notes as the need for them might appear and pass.

168. *Banks and the federal treasury.*—When the Second Bank of the United States ceased operation the government had no option but to deposit funds in the state banks, as it had no vaults of its own. During the panic of 1837 the government was much embarrassed through the suspension of specie payments by some of the depositories. Consequently, in 1840, an act was passed which provided for the establishment of an independent treasury. The law was repealed in 1841 but re-enacted in substantially the same form in 1846. All the funds of the government were to be kept in the federal treasury and none deposited in the banks. It was pointed out at the time that this would result in a contraction of the country's currency supply when the receipts of the government were outrunning the expenditures and money was piling up in the treasury vaults and vice versa. But the people were then more concerned with safety than with elasticity.

The treasury was again put in touch with the banks by the passage of the National Banking Act, which authorized the Secretary of the Treasury to use national banks as depositories of public money, except receipts for customs. These receipts have been so large, however, and so variable in amount that they have often caused stringencies. A certain amount of money is in the pockets of the people, a certain amount in the bank reserves serving as a basis for credit, and a certain amount lies in the treasury. It has frequently hap-

pened in the autumnal season that both the amount demanded in circulation and the amount lodged in the treasury have increased suddenly at the expense of the bank reserves, especially those in New York City. This has often necessitated a contraction of credit and, at times, caused an acute financial stringency.

The condition outlined in the foregoing paragraphs was evidently caused by bad laws. The bankers of the country, particularly those of New York, were, however, often loudly blamed for allowing such conditions to arise. But among so many, who was to assume the responsibility of maintaining such reserves as would be necessary, or who would have had the power? The banker is conducting a private business for private gain and there is no reason why he should be expected to assume a public function of such magnitude. The thing to do is so to devise the banking system as to make the interest of the bankers as nearly coincident with the interests of the whole community as may be.

169. *Expedients of the Secretary.*—The responsibility fell largely upon the Secretary of the Treasury. He was given specific discretionary powers in enforcing the laws and out of these certain expedients were devised and used under certain conditions:

1. The Secretary induced national banks in one way or another to take out notes in advance of their actual needs.

2. He anticipated the payment of interest on United States bonds in order to put cash into circulation.

3. He made purchases of United States bonds for the same purpose.

4. He made a ruling that the banks need not keep a reserve against government deposits. The New York Clearing House Association, however, continued to enforce its reserve require-

ments against members, so that the effect of the ruling, so far as it concerned the New York banks, was nullified.

5. He allowed the government depository banks to substitute county, city, state, and other bonds, including, it is understood, some railway bonds, in the place of United States bonds as security for public deposits. This privilege was extended only to such banks as would agree to use the United States bonds thus released for taking out additional circulation.

6. He warned the depository banks to abstain from using their funds in Wall Street as a basis for call loans to speculators through brokers.

7. He entered into the foreign exchange market to assist the gold importing movement by giving the banks temporary deposits of gold equal to the amount they engaged for import from abroad. This removed the disadvantage under which our importing bankers labored—that of losing interest during the time the gold was in transit—and to a considerable extent stimulated gold imports.

170. *Maintenance of the gold standard.*—The treasury of the United States has assumed the responsibility of maintaining the gold standard. National bank notes and federal reserve notes may be redeemed in lawful money by the banks if they choose. The federal treasury is required to redeem the latter in gold on demand. The Act of 1900 pledges the treasury to maintain the parity of all kinds of money with gold and requires that greenbacks and treasury notes of 1890 be redeemed in gold on demand. The only way to maintain the parity of other forms of money is to redeem in gold. The treasury, therefore, has the burden thrust upon it of redeeming national bank notes, silver and subsidiary coins, silver certificates, and gold certificates in gold. The maintenance of the gold standard has depended entirely upon the solvency of the federal

treasury. When gold in large quantities is needed for exportation, the natural way to get it is to present bank notes and other kinds of current money to the treasury or one of the sub-treasuries for gold. This may result in acute embarrassment to the treasury. Following the panic of 1893 greenbacks flowed into the treasury in enormous amounts and the gold supply was drawn down to a dangerously low point.

Against gold certificates the treasury holds an equal amount of gold, so that no problem is presented in this connection. But it is likewise liable for the redemption of some $346,000,000 of greenbacks, $565,000,000 of silver, and about $170,000,000 of subsidiary coins in addition to the national bank notes and federal reserve notes. Against these liabilities the treasury holds a gold reserve of only $150,000,000. An excessive issue of notes is likely to bring pressure on the treasury for gold to be exported. The treasury is not in the banking business and can obtain gold only by selling bonds. But the fact that bonds must be sold under such conditions weakens the credit of the government and they must be sold at a sacrifice.

No other government imposes such a burden upon its financial department. In the great European countries practically all the credit money in circulation consists of bank notes for which the banks alone are liable. The same is true in Canada. The government does issue Dominion notes, but the great majority of them are either in one or two dollar denominations, and thus are always needed in the country as change money, or they are in such large denominations as to be of use only as bank reserves. Moreover, they are backed by heavy gold reserve and are practically gold certificates.

CHAPTER XV

STATE BANKS AND TRUST COMPANIES

171. *Growth of state banks.*—State banking has not received the attention from writers on banking which its relative importance warrants. This neglect is probably due in part to the great difficulty of obtaining accurate information concerning the many varieties of banking practice which have been developed in the different states.

The years immediately following the Civil War witnessed a rapid decline in the importance of state banking institutions owing to the repressive influence of the National Banking Act, hastened in its effect by the ten per cent tax on state bank notes. The number of state banks fell from one thousand five hundred and sixty-two in the year 1860 to two hundred and forty-seven in 1868. The state banking systems became moribund; the old laws regulating banks of issue were swept away by code revision, or remained unchanged on the statute books. It was generally thought that a bank could not operate profitably without the right to issue notes.

The national banking system had not long been in operation, however, before it was seen that there was a field for banks of discount and deposit. The inelasticity of the national bank note system gave an impetus to the check book. Furthermore, national banks in certain parts of the country found that the bond secured circulation was not yielding a profit because of the high price of United States bonds. Then, there were certain re-

strictions which hampered the operation of national banks and put them at a disadvantage as compared to state banks.

Chief among these restrictions was the prohibition against making loans on real estate. This did not benefit the state banks to any great extent during the early stages of the development period. During the years immediately following the Civil War both the South and the West were drawing capital from the East. Eastern capital preferred to go into pure commercial banking as practiced by the national banks, rather than into real estate loans which were not easily liquidated and the safety of which could not be easily judged at a distance.

After a few years the South and West began to accumulate capital of their own. Immediately the number of state banks began to grow. The rapid growth of state banking since that time (about 1886) may be ascribed to three or four causes, as follows: (1) the note issue of national banks was not highly profitable; (2) state banks were generally permitted to make loans on real estate, whereas national banks were not; (3) state banks were not required to have as high an initial capital in most states as was required of national banks, and could therefore be more easily established in new communities; (4) the reserve requirements were not so strict in most states as they were in the national banking system. To these four factors might be added others such as the fact that, in some states, banks were allowed to establish branches. Perhaps the most important advantage which state banks had was the comparative freedom in making loans.

On June 4, 1913, the Comptroller of the Currency reported 7,473 national banks with combined resources of

slightly over $11,000,000,000. At the same time he published reports from 14,011 state banks with combined resources of over $4,000,000,000. The capital and surplus of state banks was about $679,000,000 as compared to $1,777,000,000 for national banks. These reports are fairly accurate and come only from the incorporated commercial state banking institutions. In addition to these, there were 1,978 savings banks, 1,515 loan and trust companies, and 1,016 private banks reporting. A great many private banks did not report. In all, reports were received from 18,520 banking institutions operating outside the national banking system, with combined resources of over $14,500,000,000, and capital and surplus of nearly $2,000,000,000. The growth of state and private banking institutions has taken place largely in the Western, Southern and Pacific states.

172. *Trust companies.*—The growth of the modern trust company dates likewise from a comparatively late date. The word "trust" has been long used for titles of banking and financial institutions for the purpose of signifying strength and inspiring confidence. These old institutions, such as the North American Trust and Banking Company of New York and the Ohio Life Insurance and Trust Company, were not trust companies in the modern sense of the word.

It appears that the first institution to be incorporated in the United States with the power to act as trustee was the Farmers' Loan and Trust Company of New York, which was incorporated in 1822 under the title of the Farmers' Fire Insurance and Loan Company. The first charters, allowing the trust privilege, were given to insurance companies; and for many years the insurance and trust businesses were carried on together.

After a while the business of the trust company began to branch out until it included, in addition to the function of trustee, those of executor, administrator, guardian, receiver, assignee, transfer agent, investment agent, fiscal agent, registrar, promoter, underwriter and various other functions. At first, trust companies were not supposed to accept demand deposits; but this function and others have been added until the modern trust companies have come to do a general banking business. They also do a guarantee and safe deposit business. When the trust business began to expand and to assume more and more the nature of general banking, the trust companies gradually divorced themselves from the insurance companies or were forced apart by legislation. Insurance companies have, of course, remained an important factor in the financial field because of the enormous sums which they have to invest.

In the larger cities, trust companies have become formidable rivals of the state and national banks. One thousand five hundred and fifteen loan and trust companies reported to the Comptroller of the Currency in 1913 with resources of over $5,000,000,000, or about one-half the resources of national banks. The capital and surplus amounted to nearly $900,000,000. The big trust company development has come in the eastern and middle-western states.

173. *Danger of trust companies.*—It is evident that there is a danger in combining trust business with banking business. A certain part of the trust company's liabilities takes the form of time deposits; another part consists of demand items. Ordinarily about seventy-five per cent of the resources consist of bonds, securities and commercial paper. One-half the resources are kept as deposits in the banks, for which a low rate of interest is

received. This enables trust companies to pay interest on demand deposits and thus gives them an advantage in competing for deposits. When a sudden demand for cash comes, the trust companies draw out their deposits and embarrass the banks. The inherent danger of the situation is well illustrated by the failure of the Knickerbocker Trust Company in 1907 and the consequent embarrassment of other banks in New York City. Some states, notably New York, have passed laws requiring the carrying of cash reserves in the company's own vaults and imposing certain other restrictions.

174. *State banking legislation.*—The states have been slow to change their banking laws since the passage of the National Banking Act. This is especially true in the South, where the whole tendency is for the states to interfere as little as possible with private business. It is highly desirable that certain changes should be made so as to harmonize the state systems with the federal reserve system. For the most part, where amendments have been made at all, they have been modelled after the federal law. Then, one state often copies from another. For instance, Kansas followed the example set by Missouri, and Oklahoma, in turn, was influenced by Kansas. Despite the common model which all had in the federal law and the tendency to follow each other, the forty-eight states have almost as many different kinds of legislation. We will consider a few of the more important legal provisions.

175. *Corporation.*—The power of chartering banks, as well as other corporations, rests in the legislature unless the constitution provides otherwise. In most of the states there is a general banking law which applies alike to all banks within the state, and which is under the administration of some such official as a bank-

ing superintendent. A special act of the legislature is necessary for incorporating a bank in a few states. In some states the banking law is merged with the general corporation laws. National banks have a strong hold in New England and the provisions for establishing state banks are so onerous as to be almost prohibitive. In general, it may be said that the general banking law has proved more satisfactory.

176. *Capital.*—Nearly all the states require some minimum capital, but the amount is, in almost every case, less than that required for national banks. The minimum requirements vary from $5,000 to $100,000. In some states the amount is graded according to the size of the communities in which the bank is to be established. This is the principle which was applied in the National Banking Act. It is evidently a crude way of regulating the ratio of capital to the volume of business, but it has the great advantage of being simple to administer. Kansas has adopted a more scientific scheme. The law limits the total investments of any bank to four times its capital and surplus. As a result of this provision, the Kansas banks are accustomed to carry a large part of their earnings to surplus, thus adding to the strength of the bank.

While practically all the states now require the subscription of a minimum amount of capital, they do not have adequate laws for enforcing the actual paying in of the capital or for preventing its retirement after it is paid in. Consequently, many depositors have been deceived when reading a bank statement because the nominal, and not the actual paid-up capital, is published in many cases. There is something to be said in favor of allowing a part of the capital to be paid in instalments after the bank begins business. Not all

the capital is needed at first and the provision makes for ease in establishing banks in new communities. The trouble lies in the fact that people are often led to believe that the bank is stronger than it is. A general principle should be laid down that no bank should be allowed to impair its capital without good cause.

177. *Supervision.*—The aim of bank supervision is to make sure that the law is being complied with and to empower some official to act when violations occur. Two means are used in reaching the conclusion as to whether a bank is obeying the law: (1) Frequent reports under oath are required from bank officials; (2) examinations are made from time to time by state officials. Both reports and examinations should come at times when the bank is not expecting them, so as to prevent "window dressing."

Some state examiners are paid by fees, receiving so much for each bank that is examined. Sometimes the amount of the fee is made to vary with the size of the bank. Usually the expenses are paid by the banks. The fee system of payment is undesirable. It tends to cause the examiner to rush through his examination so as to get to another bank and earn as much as possible. The same criticism had been made against the National Banking Act. The Comptroller of the Currency said, in his report for 1887: "The present system establishes relations between the bank and the examiner which are inconsistent with the duties of that officer, and with what ought to be his attitude toward the bank." The Federal Reserve Act corrects this evil by placing the examiners on a salary basis. Most states have already adopted the salary system. Banks are assessed for the expenses just as under the fee system.

A few of the states do not require regular reports; a

still greater number do not make any provision for regular examinations. Much advance has been made in this respect, however, since 1880. The southern and northwestern states have been most backward. Over half the states give state officials power to apply for a receiver; a somewhat smaller number give the officials power to take possession of a bank pending appointment of a receiver.

178. *Mutual bank examinations.*—In some of the larger cities the banks have adopted a system of mutual examination through the clearing house organization. This applies to national banks as well as to state institutions. The most striking example of the effectiveness of this scheme is, perhaps, the action of the Chicago Clearing House after the failure of the Walsh banks in that city. These examinations are more frequent and are made by men who are thoroughly conversant with local conditions. Horace White says of this scheme that: "It is perhaps the most important advance in banking science that has taken place in this country since the passage of the National Banking Act."

179. *Real estate loans.*—The permission to make loans on real estate has been one of the most characteristic distinctions between the powers of state and national banks. The Federal Reserve Act alters this by permitting national banks to lend on real estate under certain conditions. The danger of lending on real estate is well known. While it may be permitted to a certain extent, the limits should be carefully defined.

There is something, however, to be said in favor of lending on real estate. In the development of every community there is a time when the functions of a sav-

ings bank and of a commercial bank are blended in one institution. In an agricultural community, a bank is a place for the deposit of savings. If the proportion of long-time deposits is sufficiently large, there is no reason why a part of the bank's loans should not be based on real estate. The returns are relatively high. As a community grows there arise two kinds of banks which become quite distinct in nature. The one is a savings or investment bank; the other, a commercial bank. Speaking generally, the distinction becomes more and more clear as the population becomes more dense. Commercial banks in large cities, and even in the most thickly populated states, such as New Jersey, have few time deposits and, therefore, should not lend on real estate. This principle is recognized to a limited extent in the provision of the Federal Reserve Act, which prohibits banks in central reserve cities from making real estate loans and which limits all real estate loans to farm lands. In conclusion, it may be said that there is nothing inherently bad in the real estate loan, so long as it is made by the right kind of banks and is not carried to excess.

180. *State bank failures.*—The two final tests of a banking system are: (1) the extent to which it meets the needs of the community; and (2) the percentage of bank failures. Statistics of state bank failures are difficult to obtain. Many states are reluctant to give the officers charged with the execution of the banking laws any control over failed banks. The Comptroller of the Currency was, for a long time, unable to get any dependable information. It is claimed that such figures as the federal authorities have published have been unfair to state banks, because in many instances they included failures of private banks and savings banks. This mis-

take was made in the report of the Indianapolis Monetary Commission.

Since 1892 we have been fortunate in having the reports of the Bradstreet Commercial Agency which are reasonably accurate. The comptroller now relies chiefly on Bradstreet's for his information on this point. There is still a certain amount of confusion between state banks and saving banks. During the year ending June 30, 1913, eighteen state bank failures were reported, the assets at the time of the failure being slightly over seventy-three per cent of the liabilities. The total losses to creditors, after stockholders had contributed the additional amounts for which they are liable, is not known. During the year ending October 31, 1913, there were six national bank failures, one of these being the mammoth failure of the First-Second National Bank of Pittsburgh, with a capital of $3,400,000. The affairs of eight insolvent national banks were closed during that year, the average dividends paid to creditors being about seventy-eight per cent. During the year ending June 30, 1913, the comptroller received reports of failures of four savings banks, three trust companies, and fifteen private banks. The per cent of assets to liabilities for the total of these failures was about eighty-five.

On the whole, the showing is not so unfavorable to state banks as it is sometimes supposed to be. The state banks have their own particular work to do. Their field was especially distinctive before the passage of the Federal Reserve Act. It remains to be seen whether the new federal system will be such as to allow its members to perform the functions which formerly could be carried on only by state banks. If so, it seems desirable that as many state banks as possible should join the

federal reserve system for the sake of uniformity, if for no other reason. The comparatively high capital requirement and certain other restrictions of the federal laws will still leave a field for the operation of many state banks.

CHAPTER XVI

BANKING REFORM IN THE UNITED STATES

181. *Defects of the national banking system.*—The advantages and defects of the national banking system have already been pointed out. It may be well to summarize the defects briefly again. There are four important criticisms, as follows: (1) the note circulation was inelastic; (2) there was no central gold reserve and no central control of the system; (3) the assets of the banks were not liquid because of the lack of a system of rediscounts and acceptances; (4) the federal treasury was unduly burdened with the redemption of credit money. There were other defects but they were due primarily to these four.

Twenty years ago bankers and economists began to point out the defects of the system and to suggest various reforms. The most notable contributions toward the reform movement came from the Indianapolis Monetary Commission which made a report in 1897, and from a committee of the New York Chamber of Commerce which reported in 1906. These reports set the bankers and economists of the country to thinking, but nothing definite was accomplished.

The panic of 1907 painted the defects of the banking system in such a vivid light that people all over the country arose and demanded reform of some kind. Few knew just what kind of reform was needed. Consequently, Congress at once appointed the National Mone-

tary Commission with instructions to investigate the whole situation and report suggestions for new legislation.

It was soon found, however, that the work of the commission was certain to require time and Congress resorted to a temporary expedient—the Aldrich-Vreeland Act of 1908. This Act has already been explained. Its purpose was to prevent the possibility of a repetition of the panic of the previous year through a provision for the issue of an emergency circulation by national banks. The Act was to expire by limitation on the thirteenth day of June, 1914. It was hoped that in the meantime some legislation of a permanent nature might be enacted.

182. *The Aldrich plan.*—After four years of extensive investigation the National Monetary Commission submitted to Congress a report which included a plan for the establishment of a new banking system. The plan is ordinarily called the Aldrich plan, as Hon. Nelson W. Aldrich, then senior senator from Rhode Island, was chairman of the commission. The essential feature of the plan was the establishment of a banking association, to be called the "National Reserve Association." In reality it amounted to the establishment of a central bank in Washington, D. C. Its stock was to be subscribed by the national banks of the country in certain amounts proportionate to their capital. The government was to share in all earnings above a certain per cent which was to go to the stockholders and to surplus. No bank was to be compelled to join the association.

In speaking of the plan before the Eighteenth Annual Convention of the National Association of Credit Men, Professor W. A. Scott said:

The plan of reform in the bill took account of our banking history and conditions. It proposed the establishment of local associations of banks and the grouping of these into regional associations, and the grouping of these regional associations into a national association with its head office at Washington. The functions assigned to this organization of the banking institutions of the country were essentially the same as the functions performed by the great central banks of Europe—i. e., the rediscount of commercial paper for banking institutions, the holding and administration of the bank reserves of the country, the service as depository and distributing agent of the United States Government, the issue of notes against commercial assets; and a system of control was devised which, in the opinion of the commission, and of most other persons, who gave it careful attention, would prevent its domination by any group or interest.

Opposition was based largely on the ground that the Reserve Association was to be controlled by directors elected by the member banks. It was feared that the system would fall into the control of the great financial interests of the country. Experience has taught us that a great central banking institution, such as was proposed in the plan, should be controlled by the government. We have seen the results of private control in the First and Second Banks of the United States.

The real obstacle to the Aldrich plan was the inactive rather than the active opposition. A long campaign of education was necessary as well as, in the judgment of many, a more definite arrangement to make sure that the control should not by any chance fall into the hands of the great financial interests of New York City. The details of the plan were far from perfect, but it was constructive legislation and largely along the right lines. The world's experience and especially that of European countries, together with the consensus of opinion among

the world's experts in banking, seems to indicate that a central bank, such as the National Reserve Association would have furnished, would go far toward the solution of our banking problems. But public opinion was so strongly against it and its organization, which put the chief control in the hands of the bankers themselves, that the Aldrich plan was not adopted. However, an enormous amount of good was done through arousing public interest in the subject and in crystalizing worthwhile public opinion. It was paving the way.

183. *The Federal Reserve Act.*—When the Democratic party came into power in 1913, it considered itself pledged against the Aldrich plan or any plan involving a central bank. It, therefore, set about the task of devising a new banking system which should remove the defects of the national banking system without establishing a central bank.

The so-called Glass-Owen Bill was submitted to Congress and, after long consideration and numerous amendments, was passed and signed by the President on December 23, 1913, under the title of the Federal Reserve Act. The Act does not establish a central bank but does aim to establish a centralized control over the whole banking system. Provision is made for an elastic issue of notes on the banking principle. A system of acceptances of foreign bills and of rediscounts is provided. The federal treasury is not relieved of the liability for redeeming credit money; indeed, it is now liable for notes of the federal reserve banks in addition to the other kinds of credit money for which it was already liable. The system is under government control.

We will now take up the Act in some detail and it will be seen how far it complies with the principles of sound banking which have been explained and to what

extent it fails. It is not to be expected that a perfect system should have been constructed all at once, in the whirl of political life and the multiplicity of counsel which always surrounds our legislators. A distinction should be made in the beginning between the terms national and member banks. The latter term includes both all national banks and state banks which are members.

184. *Organization.*—The President appointed an organization committee which was instructed to divide the continental United States, exclusive of Alaska, into not less than eight nor more than twelve federal reserve districts and to designate in each district a city, in which a federal reserve bank should be established. Twelve districts were determined upon and the following twelve cities were chosen for the location of the regional banks: Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Minneapolis, Kansas City, Dallas, and San Francisco.

The system is under the control of the Federal Reserve Board, consisting of seven members, as follows: The Secretary of the Treasury, ex-officio, the Comptroller of the Currency, ex-officio, and five members appointed by the President with consent of the Senate. The five appointed members serve for rotating terms of ten years at an annual salary of $12,000 each. Two of these five are designated by the President as governor and deputy governor respectively. The governor is the active executive officer. The President has power to fill vacancies which occur while the Senate is not in session.

There is a Federal Advisory Council consisting of twelve members, one elected and paid by each reserve bank. The Advisory Council is empowered to confer

with the Reserve Board on general business conditions, to make representations concerning matters under the jurisdiction of the Board, and to make recommendations regarding discount rates, and other operations of reserve banks. The Council has no direct voice in the control of the system but may act in an advisory capacity only.

Each reserve bank has a board of directors consisting of three classes: Class A, three members chosen by and representative of the member banks; Class B, three members chosen by member banks and representative of general business interests aside from banking; and Class C, three members chosen by the Federal Reserve Board. One member of Class C, who is a man of tested banking experience, is designated by the Reserve Board as federal reserve agent and chairman of the board of directors of the reserve bank.

The manner of choosing the directorates of member banks is not changed.

185. *Capital stock.*—The Federal Reserve Board does not have any capital. Each of the reserve banks is required to have, before beginning business, a minimum capital of $4,000,000. It was required that one-sixth of the capital should be paid in at the outset, one-sixth within three months, and one-sixth within six months. The other three-sixths might remain subject to the call of the Reserve Board. Every national bank was required to subscribe to the capital stock of the reserve bank of its district an amount equal to six per cent of its paid-up capital and surplus. National banks failing to join within one year after the passage of the Act were to be forced to give up their national bank charters. It was provided that state banks might become national banks or, under certain conditions, that they might be-

come members of the system without giving up their state charters.

In case bank subscriptions should not provide the requisite $4,000,000 of capital, the stock was to be thrown open to public subscription. This failing, the government was to underwrite the remainder. The capital stock of the reserve banks is to increase or decrease as the capital and surplus of their respective members increase or decrease.

The provision for lapsing charters practically forced national banks into the system. Otherwise, they would have had to retire their circulation at a sacrifice. National banks have had to pay around par for the two per cent United States bonds because of the circulation privilege attached. Remove this privilege and a great part of the value of the bonds is destroyed. No individual can afford to pay par for a two per cent security.

186. *Powers of the Federal Reserve Board.*—An examination of the powers which are given to the Reserve Board shows that it can, if it wishes, assume almost absolute control of the operations of the reserve banks. This is as it should be, assuming that the power will be exercised with discretion. Centralized control is one of the chief advantages which a great central bank brings to a banking system.

The following are the chief powers vested in the Reserve Board:

1. To examine reserve banks and member banks and to publish weekly statements (required).

2. To permit or require one reserve bank to rediscount for another reserve bank at a rate of discount to be fixed by the Reserve Board.

3. To suspend any of the reserve requirements specified in the Act for a period of not over thirty days, pro-

vided that it shall establish a graduated tax on deficiency of reserves.

4. To supervise, through the Comptroller of the Currency, the issue and retirement of federal reserve notes.

5. To add to the number of cities classified as reserve and central reserve cities under the National Banking Act; or to reclassify existing reserve and central reserve cities.

6. To suspend or remove any officer or director of a reserve bank, for cause stated in writing.

7. To require the writing off of doubtful or worthless assets upon the books and balance sheets of reserve banks.

8. To suspend, for cause, the operations of any reserve bank and to operate, liquidate or reorganize such banks.

9. To require bonds of federal reserve agents and to make other precautionary regulations.

10. To exercise general supervision over federal reserve banks.

11. To permit national banks to act as trustees, executors, administrators, or registrars of stocks and bonds when not contrary to state or local law.

12. To employ necessary assistants, etc.

13. To render a report annually to the Speaker of the House of Representatives of the operations of the Board (required).

14. To exercise functions of a clearing house and to require reserve banks to do the same for member banks.

15. To define the character of bills eligible for rediscount by reserve banks, and to limit and regulate rediscounts and acceptances.

16. To establish the rate of interest to be charged reserve banks on federal reserve notes outstanding.

17. To fix the charges to be collected by member banks and reserve banks for checks cleared through the reserve banks.

18. To levy semi-annually upon the reserve banks, in proportion to their capital stock and surplus, an assessment sufficient to pay the expenses of the Board.

It should be noted that the Reserve Board has no capital and that it does no actual banking business. It is a controlling body.

187. *Operations of federal reserve banks.*—The banking operations are carried on by twelve regional banks instead of by a central institution as provided for in the Aldrich Plan. These reserve banks are essentially bankers' banks, having very slight dealings with the public directly. The reserves are collected in twelve reservoirs instead of one, as the European practice is. The following duties and powers are assigned to the reserve banks:

1. They are required to receive for deposit at par checks and drafts drawn on any of their depositors; and checks and drafts from other reserve banks drawn on any bank in the system.

2. They may accept deposits only from the United States, member banks of their respective districts and from other reserve banks. Government funds, excepting the five per cent redemption funds, may be deposited either in the reserve banks or in member banks.

3. Discount commercial notes, drafts, and bills of exchange, indorsed by member banks "protest waived," not including those drawn to carry stocks or securities except obligations of the United States. Such paper may not run over ninety days, except agricultural and cattle paper which may run for six months. The re-

discount operations are carried on subject to the supervision of the Federal Reserve Board.

4. Discount acceptances which are based on foreign trade, having not over three months to run and indorsed by at least one member bank. The amount of acceptances so discounted may not exceed one-half of the paid-up capital and surplus of the bank for which the rediscounts are made. The amount bearing the name of any one person may not exceed ten per cent of the capital and surplus of said bank.

5. Buy or sell in the open market, at home or abroad, cable transfers, bankers' acceptances, and bills of exchange, of the kind eligible for rediscount, with or without the indorsement of a member bank.

6. Deal in coin or bullion and make loans thereon.

7. Buy or sell securities of the United States or of any political subdivision thereof, including irrigation, drainage and reclamation districts.

8. Purchase from member banks bills of exchange, as defined above, and sell them with or without indorsement.

9. Establish from time to time, subject to review and determination of the Reserve Board, rates of discount.

10. Establish accounts with other reserve banks for exchange purposes and, with the consent of the Reserve Board, open banking accounts in foreign countries and establish agencies abroad. These agencies may buy and sell, with or without indorsement, bills of exchange having not over ninety days to run and bearing the signatures of at least two responsible parties.

11. They are required to establish branches in their districts and may do so in the districts of other reserve banks which have failed or have been suspended.

12. They may issue bond secured notes under the

same conditions that apply to national bank notes, except that the total amount is not limited to the capital stock of the issuing bank.

13. They may issue federal reserve notes the details of which will be explained in the following section.

188. *Federal reserve notes.*—The Federal Reserve Act provides for an elastic issue of circulating notes. This is an admirable feature. It is to be regretted, however, that the volume of these notes must for several years bear so small a proportion to the total supply of credit money. While the notes are elastic themselves, their relative unimportance in the total currency supply causes their elasticity to be less effective than could be desired. The foreign countries which enjoy the benefits of an elastic currency have their money supply well saturated with the elastic medium.

Reserve banks may exchange federal reserve notes for commercial paper which member banks bring in for rediscount. This gives them the quality of elasticity. They are obligations of the United States as well as of the issuing banks. They are redeemable in gold or lawful money at any of the reserve banks and in gold at the federal treasury. They are receivable for all debts to member banks, reserve banks, and the United States. Reserve banks must deposit with the federal reserve agent of their district an amount of commercial paper equal to the reserve notes outstanding. The Reserve Board may at any time require the deposit of additional collateral. The outstanding circulation of any reserve bank may be reduced by depositing lawful money or its reserve notes with the federal reserve agent.

The law forbids any reserve bank to pay out notes of another reserve bank under penalty of a ten per cent tax upon all notes paid out. Notes of other banks

must be returned to the issuing bank for credit or redemption. This provision tends to cause the notes to flow back to the issuing bank as soon as they have done the work for which they were intended. The outstanding circulation thus may contract as well as expand.

Every federal reserve bank is required to keep on deposit with the federal treasury a sum in gold sufficient, in the judgment of the Secretary of the Treasury, for the redemption of its notes outstanding, but in no event less than five per cent. This redemption fund may, however, be counted as part of the required reserves against notes and so works no hardship on the banks. The notes are issued in denominations of $5, $10, $20, $50, and $100 and bear the distinctive numbers of the issuing banks.

189. *Reserves of federal reserve banks.*—Reserve banks are required to maintain a forty per cent gold reserve against reserve notes outstanding, and not offset by gold or lawful money deposited with the federal reserve agent. In emergency the Reserve Board may permit any reserve bank to lower its reserves provided that the Board shall establish a graduated tax of not more than one per cent per annum upon such deficiency below forty per cent until reserves fall to thirty-two and one-half per cent. When the reserves fall below thirty-two and one-half per cent, a tax is levied at the rate increasingly of not less than one-half per cent per annum upon each two and one-half per cent or fraction thereof that such reserve falls below thirty-two and one-half per cent. The tax on deficiency of reserves must be added to the rates of interest and discount fixed by the Reserve Board.

The reserve banks must maintain reserves in gold or lawful money of not less than thirty-five per cent against

demand deposits. This reserve requirement, also, may be suspended by the Board provided that a graduated tax is imposed on deficiency of reserves. The amounts of the tax are to be fixed by the Board in this case.

190. *Operations of member banks.*—The Federal Reserve Act confers certain powers upon national banks in addition to the ones which they already possessed. Some of these powers are also conferred upon state banks which are members. It should be understood, however, that the federal law does not confer any powers upon state banks in addition to those which are granted by the state laws under which they are incorporated. State banks cannot join the system if such action contravenes state law. For example, the law of some states forbids banks to own stock in any corporation. To become members of the federal reserve system they must buy stock in the reserve bank of their district. Thus they cannot become members until the state law is changed.

Any national bank having a capital of $1,000,000 or more may, with the permission of the Reserve Board, establish branches in foreign countries for the furtherance of foreign commerce of the United States, or to act, if required to do so, as fiscal agents of the United States.

Any member bank may accept drafts or bills of exchange drawn upon it and growing out of transactions involving the importation or exportation of goods, having not more than six months sight to run. The total acceptances of any one bank are limited to one-half its paid-up and unimpaired capital stock and surplus.

National banks, not located in a central reserve city, may make loans secured by improved and unencumbered farm land, situated within their own district. The loans may not exceed fifty per cent of the actual

value of the property offered as security and may not run over five years. Any one bank may make such loans to an amount equal to twenty-five per cent of its capital and surplus or to one-third of its time deposits (not due under thirty days). The Board may add to the cities in which the banks cannot make farm loans.

Member banks may charge customers the actual expense of collections and of exchange. The charge to be made on checks cleared through the reserve banks is fixed by the Reserve Board.

191. *National bank notes.*—The Aldrich-Vreeland Act which was to have expired in 1914 was continued with some changes by the Federal Reserve Act to June 30, 1915. This provision was made so that emergency currency might be issued during the transition period should occasion arise.

Provision is made for the gradual retirement of the national bank notes. At any time within twenty years after December 23, 1915, any national bank desiring to retire the whole or any part of its notes, may file with the Treasurer of the United States an application to sell for its account, at par and accrued interest, United States bonds securing circulation to be retired. These applications are turned over to the Reserve Board, which may, at its discretion, require the reserve banks to purchase the bonds thus offered. Reserve banks are not permitted to buy more than $25,000,000 United States bonds in any one year whether from national banks or in the open market. The amount which is to be purchased from the banks is allotted in proportion to capital and surplus of each reserve bank. As was stated before, the reserve banks can issue notes on the bonds purchased in this way.

If the reserve banks do not wish to hold the bonds as

a basis of circulation they may turn them over to the government. Upon application of any reserve bank, approved by the Reserve Board, the Secretary of the Treasury may issue, in exchange for United States two per cent bonds bearing the circulation privilege, but against which no circulation is outstanding, one-year three per cent gold notes of the United States without the circulation privilege for one-half of the bonds presented, and thirty-year three per cent gold bonds without the circulation privilege for the remainder. The government reserves the right for a period of thirty years to sell back to the reserve banks for gold any of the one-year notes at the end of the year in which they were issued. Upon approval of the Reserve Board, any reserve bank may exchange its gold notes for three per cent bonds of the kind described above.

It is seen from the above that national banks may or may not retire their notes as they choose up to the amount of $25,000,000 per year. Even when they are retired their place may be taken by a similar bond secured circulation issued by the reserve banks if they choose.

The provision of the National Banking Act which required national banks upon organization to purchase and deposit with the federal treasury a certain amount of registered United States bonds is repealed.

192. *Reserves of member banks.*—National banks, as before, are not required to carry any reserves against outstandng circulation. The five per cent redemption fund must be maintained, however, and may not now be counted as a part of the reserves against deposits.

In the Act time deposits are defined as all deposits which are subject to not less than thirty days' notice before payment. Against these the banks must maintain a

five per cent reserve. All other deposits are counted as demand deposits.

A radical change is made in the matter of reserves against demand deposits. National banks are no longer allowed to keep a part of their reserves with approved reserve agents in reserve and central reserve cities. The total reserve requirement is lower and a part of it may be kept with the federal reserve banks. Member state banks must maintain the same total reserves, but a part of the reserve may be deposited with other banks where the state laws require it during a period of three years after the organization of the system. "Except as thus provided, no member bank shall keep on deposit with any non-member bank a sum in excess of ten per centum of its own paid-up capital and surplus."

The classification of reserve and central reserve cities remains the same as under the National Banking Act, but may be changed by the Reserve Board. A period of three years is allowed for the transferring of reserves to the federal reserve banks. After three years from the establishment of the reserve banks, the banks are required to keep the following reserves against demand deposits and distribute them as specified below:

Central reserve city banks must maintain an eighteen per cent reserve. Six-eighteenths must be in their own vaults, seven-eighteenths in the reserve bank of the district, and the remainder either in their own vaults or in the reserve bank.

Reserve city banks must maintain a reserve of fifteen per cent; of this five-fifteenths must be in their own vaults, six-fifteenths in the reserve bank, and the remainder either in their own vaults or in the reserve bank.

Country banks must maintain a twelve per cent re-

serve: four-twelfths in their own vaults, five-twelfths in the reserve bank, and the remainder in their own vaults or in the reserve bank.

The reserve carried by a member bank with the reserve bank may be checked against, under regulations of the Reserve Board. But no bank may make any loans or pay dividends until the total legal reserve is fully restored.

A part of the bank reserves of the country are thus held in the twelve federal reserve banks which are controlled by the Reserve Board. They may be forced to use their reserves together, just as a central bank would do, if the Board wishes. Against these deposits and others it will be remembered that the reserve banks must carry a thirty-five per cent reserve. The other sixty-five per cent may be used in rediscounting and in other operations of the banks.

If the reserves of one reserve bank begin to drop to the danger point the Board may require some other reserve bank, which is in a stronger position, to rediscount some paper for the weaker bank and thus enable it to build up its reserves again. Should excessive credit expansion and consequent gold exportation threaten the country the Reserve Board may require any or all the reserve banks together to raise their discount rates and thus check the inflation just as is done by the great central banks of Europe.

It is evident that the check will be more effective if the reserve banks are relatively important in the banking strength of the country and if they are effectively and energetically controlled by the Reserve Board. It is quite natural that any one reserve bank should protest if it is required to raise its discount rate while the rates of other reserve banks remain the same, as such action

must necessarily curtail its lending operations and may reduce its profits. The separate reserve banks will always be influenced by customers to keep the rate as low as possible and thus make borrowing easy in the district. Each reserve bank will be pulling for capital for its own district and the interests of different districts are sure to conflict. The Reserve Board needs to carry a steady and firm hand and to exercise its powers wisely, having regard for the best interests of the country as a whole. A weak and vacillating Board has it in its power to precipitate a panic; a strong Board may lead the country into a period of unparalleled prosperity.

193. *Miscellaneous provisions.*—There are certain miscellaneous provisions of some importance. Reports and examinations are provided for and the law is strict in this respect. Examiners are to be paid on a salary basis. This is a great improvement over the National Banking Act.

National banks in Alaska or outside the United States are not required to come into the system; but may do so, except those in the Philippine Islands, and may become members of any reserve district. State banks which become members, while retaining their state charters, must comply with the same conditions as national banks regarding capital, surplus, reserves and examinations; and must comply with the regulations imposed by the Reserve Board.

The principle of double liability is applied to stockholders of the reserve banks as well as those of the national banks. Stockholders in national banks are held for all debts of the bank to the extent of their double liability. Those of reserve banks are held liable in the same way, but the liability is distributed equally and ratably and one is not liable for another.

The Act expressly states that the Gold Standard Act is not to be altered. It likewise states that the authority of the Secretary of the Treasury is not to be impaired. Where an apparent conflict arises between him and the Reserve Board, he is to take precedence.

Voting power in the federal reserve banks rests only with stock in the hands of member banks. Such stock may not be transferred or hypothecated.

Earnings of the reserve banks are to be distributed in the following manner: (1) after payment of all expenses the stockholders are to receive a six per cent cumulative dividend; (2) one-half the remainder is to go to a surplus fund until it shall amount to forty per cent of the capital of the bank; (3) all earnings above these amounts go to the United States, and may be added to the gold reserve against United States notes or may be applied in liquidating the bonded debt.

PART II: BANKING PRACTICE

CHAPTER I

INTRODUCTION

1. *The business man's point of view.*—The average business man stumbles into his banking relations. He feels the need of a bank account and inquires among his friends regarding the banks in his neighborhood or opens his account without devoting much study to the subject. His choice is governed, very often, by conditions which should be given minor consideration while matters of much more importance are neglected.

An attempt has been made in the following pages to set forth the various points a business man should consider in dealing with his bank, to tell him how to establish and maintain bank credit—in short, to regard the bank from his point of view, describing in detail only such practical operations as may be necessary to make clear the subject under discussion.

In any American city of more than twenty-five thousand inhabitants, several kinds of banking institutions will be found, each with its peculiar functions. One is specially qualified to satisfy the needs of the manufacturer, the merchant and the trader; another is authorized by the laws under which it does business to perform all the functions of the former and in addition it may assist the business man by making loans, under certain restrictions, on real estate; still another institution is primarily a fiduciary, acting as executor, trustee, agent, receiver, and in similar capacities; a fourth is

organized for the benefit of the employé rather than that of the business man.

Having established correct banking connections, the business man should know something of the operations required in collecting the items he deposits, the records that must be kept, the ways in which loans are made, the methods employed in determining whether or not a loan should be granted, and, finally, he should know the little things that have so much influence when it becomes necessary to ask for a loan.

Let us first get a clear understanding of the different kinds of banking institutions.

2. *National banks.*—National banks are incorporated under the National Bank Act, a Federal statute. They are organized for the purpose of discounting and negotiating promissory notes, drafts, bills of exchange, and other evidences of debt; to receive deposits; to buy and sell exchange, coin and bullion; to lend money on personal security; and to obtain, issue and circulate notes in accordance with the provisions of the statute.[1] These are the principal powers granted to all national banks. Whatever incidental powers are necessary to carry out and make effective the powers enumerated, are also implied.

The national bank is distinctively a commercial bank. Its deposits are almost exclusively demand deposits; that is, they are deposited with the bank to be paid on the demand of the depositor. Time deposits, not previously given any special prominence in national bank legislation, were recognized in the Federal Reserve Act, in which they were exempted from the usual reserve

[1] The note issue privilege will gradually disappear and be superseded by the federal reserve notes authorized under the Federal Reserve Act of December 23, 1913.

requirements. National banks are now allowed to keep a lower reserve against such deposits. The Federal Reserve Act defines demand deposits as, "all deposits payable within thirty days," and defines all time deposits as those "payable after thirty days, and all savings accounts and certificates of deposit which are subject to not less than thirty days' notice before payment."

The popular notion that there is some particular governmental guarantee back of the national banks is erroneous. The government examines and supervises these banks, and in the large cities its supervision is efficient, but up to the present time the examination of the small national bank has not been thorough. The trouble has been that the examiners were paid on a commission basis; therefore, the more banks an examiner visited in a given time, the more money he received. It is a recognized fact that auditing of any kind should not be attempted on such a basis. The authors of the Federal Reserve Act recognized this weakness in the National Bank Act and altered its provisions so that examiners will be paid fixed salaries. This change will cause a marked improvement in the character of the examinations of the smaller national banks.

3. *State banks.*—In their laws, most states provide for the organization of banks of discount, similar to the national banks. The National Bank Act, as well as most of the state bank legislation, was modeled after some of the old state statutes.

The revised banking laws of the State of New York, which became effective on April 16, 1914, define banks as follows:

> The term, "bank," when used in this chapter, unless a different meaning appears from the context, means any domestic

moneyed corporation, other than a trust company, authorized to discount and negotiate promissory notes, drafts, bills of exchange and other evidences of debt; to receive deposits of money and commercial paper; to lend money on real or personal security; and to buy and sell gold and silver bullion, foreign coins or bills of exchange.

Note how closely this definition follows that of the national banks. Practically the only differences between the national bank and the average state bank are: first, though the state banks, in many cases, are privileged to issue notes under their charters, these issues are practically prohibited because they are subject to a ten per cent tax imposed by the Federal government; second, state banks are allowed, under certain restrictions, to make loans on the security of real estate, while the national banks have been prohibited from doing so until the passage of the Federal Reserve Act. Under this act, national banks in any city except New York, Chicago and St. Louis (the list may be increased at any time by the Federal Reserve Board), may lend, for terms not exceeding five years, twenty-five per cent of the bank's capital and surplus on improved farm lands, not exceeding fifty per cent of the value of the land. This provision practically removes this difference, with the exception that state banks are still permitted to make what may be termed a commercial loan and accept as additional security, a mortgage lien on city real estate. The reserves required by the different state acts are slightly different from those required by the Federal Reserve Act, but the tendency will be to alter the state statutes so that they will be in agreement with the Federal Reserve Act.

4. *Trust companies.*—A trust company is organized under state laws. Its functions vary in different states.

Trust companies organized under the laws of the State of New York are typical. They may accept and execute such trusts as may be lawfully committed to them, act as trustee in the cases prescribed by law, receive deposits of money and other personal property, issue their obligations therefor and loan money on real and personal securities. In addition to these general provisions they usually have the right to purchase, invest in and sell stocks, bills of exchange, bonds and mortgages and other securities.

The trust company was organized primarily to act as executor, administrator, agent, receiver and depositary, for individuals and corporations. Banking powers were granted in order that these functions might be performed with ease. Under the clause giving them permission to purchase bills of exchange, trust companies have transacted practically the same business as banks of discount.

5. *Savings banks.*—A savings bank is a banking institution, organized under state laws, for the purpose of gathering together the small savings of the community in which it is located, and investing them in such interest-bearing obligations as are prescribed by law. The interest so earned is divided among the depositors, after payment of expenses, providing for amortization of premiums on bonds and reserving reasonable amounts for the accumulation of a surplus. In New York state and in many others, the savings banks have no capital, the depositors being the owners of all of the assets of the association.

6. *Choosing a bank.*—The kind of service a man needs determines whether or not he shall transact his business with a national bank, a state bank, a trust company or a savings bank. If he receives many checks in the reg-

ular course of his business, and requires prompt returns, if he wishes to have pay-rolls made up for his employés, if he desires at times to discount commercial paper, if he wishes to secure loans on his own name or on collateral security to finance the turning over of his raw materials or stock in trade, the bank of discount is the kind of bank to which he should make application for the privilege of opening an account. It matters very little whether this bank is operating under the National Bank Act, or under the laws of a state, provided it is well inspected and safe.

The condition of the various banks of discount in a given community is known by reputation, but the business man should be able to secure more definite information by making a study of the published statements. These statements, unfortunately, are not so enlightening as they might be. Other things being equal, the bank with the largest proportion of capital, surplus and undivided profits, as compared with deposits, is the strongest bank. On the other hand, it is possible for a bank to have too much capital for the amount of business it can do.

For example, suppose four banks in a community show, in their published statements, the following figures:

	A	*B*	*C*	*D*
Capital, surplus and undivided profits	$100,000.00	$200,000.00	$300,000.00	$400,000.00
Deposits	400,000.00	400,000.00	400,000.00	400,000.00
Per cent of capital, surplus and undivided profits to deposits	25%	50%	75%	100%

Assuming that a reserve of 25 per cent in cash is kept to pay such checks as may be presented, the deposits and capital fund will probably be invested as follows:

Cash reserve	$100,000.00	$100,000.00	$100,000.00	$100,000.00
Loans and discounts.....	400,000.00	400,000.00	400,000.00	400,000.00
Investments	.....	100,000.00	200,000.00	300,000.00

It is evident that Bank D has in hand to pay its deposits $100,000 in cash, $400,000 in loans and discounts, and $300,000 in investments of various kinds. This manifestly is the strongest bank so far as the depositor is concerned. Cash, investments, and loans are in hand equal to twice the amount on deposit. On the other hand, this bank would never be in a position to pay large dividends on its $400,000 of capital fund, because, after deducting $100,000 to be carried as an idle cash reserve, and using the income on several hundred thousand dollars more of its resources to pay rent, salaries, taxes, light, heat, stationery and other necessary expenses, it would have a small amount of income left with which to earn dividends. It would not be in so good a position to render efficient service to the depositor as Bank A, which has a normal relation of four of deposits to one of capital and surplus, because in its endeavor to earn dividends, it would be compelled to be very careful of expenses; it would probably buy cheap stationery, employ a lower grade of clerks, rent cheaper quarters, have fewer banking connections, and all the other things that make up the sum of efficient service to depositors.

It is usually considered that the proportion of about four of deposits to one of capital and surplus is safe. It is evident that this is a much more profitable position for a bank to be in than to endeavor to earn dividends on a large capitalization with a small line of deposits. The successful bank will increase its surplus and keep the proper relation between capital, surplus and undivided profits on the one hand and deposits on the other as it grows older. Bank D would never be in a

position to increase its capital, and it would probably be compelled to use up its surplus, in order to pay running expenses.

The published statement shows the reserves carried to pay such deposits as may be demanded. It gives a general survey of the distribution of assets between cash and other reserves, loans and discounts and other investments. The cash and deposit reserves should always equal the legal requirement, the loans and discounts should not exceed the deposits, as a rule, and the investment in bonds, bank building and furniture and fixtures should not exceed the capital fund.[1] Variations depending upon the character of business done by the bank will be found, but if a bank's statements should show a continued policy of keeping only one-fourth of its deposits invested in loans and discounts and a very large proportion in bonds and stocks, one would be justified in avoiding such an institution as a depositary. He would undoubtedly find that the bank prefers speculation in securities to making local loans. A bank should support its community as much as possible, investing only such portion of its assets in securities as seems wise in order to provide a secondary reserve. Every depositor should keep a file of published statements of his bank and compare all figures.

7. *National versus state banks.*—Two things are important in making a choice between national and state banks: first, the character of reserve required, and the manner in which it is maintained, and second, the volume of real estate loans carried by the state bank.

If one is allowed to carry and does carry a much lower rate of reserve than the other, the depositor is not so secure in the one carrying the lower rate as in the

[1] This is a very general statement of the composition of a bank's statement.

one carrying the higher rate of reserve. The division of the reserve between cash and amount on deposit is worthy of note. Reserve deposited with a Federal reserve bank is practically the same as cash, because of the availability of this reserve in making payments between banks.

A reasonable amount of loans on the security of real estate is not objectionable but the prospective depositor should not place money required on demand in an institution that will invest a large portion of it in such slow loans as real estate.

8. *Loans and investments.*—The most important thing for a business man to know in order to make his choice is the one thing that is hardest to find out; that is, the character of the loans and investments. If a prospective depositor with a large balance to place, should call at a bank and say, "I wish to open an account with a large sum of money, but before doing so, am asking several banks to give me a frank statement regarding the character of their loans and investments," the officers of the bank would undoubtedly be pleased to comply with the request. The individual loans are confidential matters between the borrowers and the bank, but the general character can be outlined. Such an analysis would be of material assistance to the business man in deciding where he will open the account. In making an inquiry of this character, the prospective depositor should try to ascertain what proportion of the funds is locked up in slow loans and other investments which the bank will be compelled to hold until maturity.

The banks apparently are losing an opportunity to simplify one of the factors that has been responsible for much of the vagueness in the mind of the public as to

banking conditions. The published bank statements are rarely intelligible to the average business man. It would seem to be worth while to explain each statement for his benefit. For example a bank in an Eastern community prints its statements for distribution in the following form:

Resources		*Liabilities*	
Loans and discounts	$343,677.65	Capital	$100,000.00
Mortgages owned	15,000.00	Surplus	48,555.44
Bonds, market value	190,155.00	Reserve for taxes	1,089.62
Cash in vault	43,101.39	Due to depositors	511,064.99
Due from reserve agents	59,200.93	Cashier's checks outstanding	147.03
Vault, furniture and fixtures	7,000.00	Accrued interest payable	385.99
Accrued interest receivable	3,108.10	Total	$661,243.07
Total	$661,243.07		

EXPLANATION

We owe our depositors		$511,064.99
We have on hand to pay them:		
Cash on hand and on deposit	$102,302.32	
Bonds, convertible into cash within twenty-four hours	190,155.00	
Demand loans	12,600.00	
High grade commercial paper payable at varying dates in October, November and December	165,000.00	
High grade commercial paper payable in January and February	15,000.00	
Local time loans payable in less than eighteen days	26,007.67	
		511,064.99
Other investments in excess of deposits		150,178.08
Total assets		$661,243.07

Any depositor can understand such a statement without difficulty. Note particularly that the total of deposits is balanced by an equal amount of readily convertible assets.

9. *Trust company as a depositary.*—Trust companies

in most states are organized to act in a fiduciary capacity, and not to do a commercial banking business. The strongest trust companies do not compete for commercial deposits, but take the more remunerative work outlined in the definition of the companies. They are allowed to make a large proportion of real estate loans, and are permitted to buy and sell stocks, a privilege denied to national and state banks. As a rule, trust companies bid more strongly for time deposits and other deposits that will not be demanded without notice. They invest these long time deposits in loans having a longer time to run than the average commercial loan and, by so doing, make a little larger profit. They share this larger profit with the depositors in the shape of higher rates of interest.

If a man is appointed executor or administrator of an estate, if he has funds left with him in trust, or if he wishes to appoint a company as executor, administrator or trustee, the trust company is the institution to which he should go. It is better able to take care of such business than is the average business man. It usually has a well-trained organization, familiar with the law and methods of procedure, and takes care of the routine work with the least annoyance. Its legal advisers are much more competent than the average attorney to solve the knotty problems that present themselves in the administration of an estate or trust. Its fees are no higher than the fees allowed to an individual and it does not die before the trust has been completed.

10. *Savings bank as a depositary.*—The business man is not interested in the savings bank as a depositary for his funds, but he may be interested in borrowing money from it on the security of real estate. A loan on bond and mortgage secured from a savings bank is practically a permanent loan and gives the borrower

less trouble than one secured from any other source, except possibly an insurance company. Savings banks and insurance companies are not called upon to pay large proportions of their liabilities except under very unusual conditions and so require investments having a long time to run with as high interest rate as is consistent with safety of principal. Real estate loans fill both of these requirements.

11. *Good banking connections.*—The value of a good banking connection cannot be too strongly urged. If the wrong choice is made, the time may come when the needs of the depositor cannot be met by the depositary.

A case in point may be cited: A small but growing corporation, engaged in the manufacture of embroidery, kept its account with a trust company which did not compete with the banks of discount for commercial deposits, and which did not make commercial loans. The account was not large, but the owners of the business did their best to handle their corporation well. The time came when they needed a loan. The trust company did not care to make an exception in this case, and the depositor found it difficult for a time properly to finance its business.

Another case was presented about the same time. A young and successful manufacturer of an article in great demand had started his business with a small capital and had been borrowing for a number of years from those who might be called "loan sharks." He was compelled to pay very high rates of interest. Finally, he sought the advice of a trust company as to a method of financing his business that would relieve him of these exorbitant rates. The trust company advised him to open an account with a commercial bank in the vicinity of his business and to keep on with his present discount-

ing relations until he had established himself with a new depositary. He did so, and in less than six months had established satisfactory credit relations and was able to release himself from the clutches of the "loan sharks." The commercial bank was able to give his business the support which the trust company could not give.

CHAPTER II

OPENING AN ACCOUNT

12. *Dealing with strangers.*—There are so many ways in which a bank may be defrauded by means of checks and drafts presented to it for payment, that the officers must be very careful to whom they extend the privilege of opening an account. Accounts are sometimes opened with cash in generous amounts; all transactions for weeks afterwards are in proper order; then a check is presented against an uncollected deposit; excuses are given which seem plausible; the officer "takes a chance," pays the check presented, and a few days later the check deposited is returned with the word "fraud" written across its face. The depositor cannot be found and the bank stands the loss. This is but one of hundreds of schemes. The banker, therefore, must know with whom he is doing business.

13. *Personal accounts.*—The business man, as a rule, knows something about the banks in his community before he makes his initial call. The individual, seeking to open a purely personal account, is not always so fortunate. The officer of a corporation, or a person acting in a fiduciary capacity, though informed regarding business or personal banking relations, is not always well informed as to the correct method of approaching the task of opening an account for a corporation or for his principal.

One of the pleasantest ways to open an account with a bank is to be introduced by a depositor in good stand-

ing. A depositor whose business makes it necessary for him to interview the bank officers from time to time, so that they know him more or less intimately, will be the best sponsor.

14. *Letter of introduction.*—It is not always possible to arrange for a personal introduction. In such a case, a properly written letter addressed to an officer and signed by a depositor in good standing, or even by a mutual friend, will be of material assistance. If a person changes his residence or place of business to another city, a letter of introduction from his banker to a banker in the city to which he is going will make the opening of an account a much simpler process.

Business men frequently are called upon to give such letters of introduction, so it is hardly necessary to show how such a letter should be worded. It may, however, be worth while to offer a suggestion that will serve to make a letter of introduction of particular value to the person bearing it. Whenever matters of importance are to be transacted between the person bearing a letter of introduction and the person to whom it is addressed, there should appear in the letter a clause reading as follows:

"whose signature appears below for purposes of identification."

Below the body of the letter, on the left-hand side, the following should appear:

"Mr. ———'s signature for purposes of identification."

An introduction of this kind, showing that it was written by a person familiar with a practice which is

much used in banking, will materially facilitate the opening of an account.

15. *Without introduction.*—If it is impossible for a person to obtain either a personal or a written introduction to the bank he has chosen, he may make application for the opening of an account without an introduction and have the assurance that such a procedure will not militate against him, if he presents his case properly. It is true that some banks will not, under any circumstance, open an account with a person unknown to them. In fact, it is good banking practice not to accept accounts from strangers. This, however, is one of the rules that is strengthened by the few exceptions. There are, also, banks that will not accept well-introduced accounts, unless they believe the accounts will measure up to the standards they have worked out through years of experience.

On the other hand, many banks are so anxious to secure deposits that they will gladly take an account without an introduction, and make a quiet investigation of the depositor's credit standing afterwards. This practice cannot be commended because it has frequently entailed losses upon the banks following it. If a bank does accept an account without introduction, it should demand references and look them up thoroughly, paying no checks until the introduction is satisfactorily established. A person seeking to open an account with a bank, without introduction, should co-operate in every way possible to establish his identity at the earliest possible date, and should refrain from drawing against his balance, until he knows that the bank is thoroughly satisfied as to his identity.

16. *First impressions.*—Prospective depositors will do well to remember that first impressions are likely to

linger in the mind of the officer who opens their accounts. The execution of little details at this time may mean much in subsequent dealings with the bank.

One of the mistakes frequently made by persons seeking to open an account is an attempt to borrow from the bank the money with which to open the account. On its face, this seems like a foolish proposition. It is, nevertheless, presented to the banker as often as any problem he has to meet in connection with taking new business. There is hardly a bank in the country that will open an account with a loan, except under the most unusual circumstances.

Another mistake that has injured the credit standing of many depositors is the failure, when opening an account, to declare the intention of asking for a loan later on, and to indicate the approximate amount that will be needed. This declaration of intention when seeking to begin business relations gives the bank an opportunity to make an investigation and practically decide on a line of credit before accepting the account. If the depositor does not state his intentions in the beginning, the bank is inclined to look with suspicion on the first application. It makes a much closer study of the depositor's affairs when it has a definite application in hand than when it is making an investigation on general principles. As a result, the loan is declined; the depositor withdraws his account and repeats the performance in other banks until he finds one that will grant his loan. In the meantime, his creditors have noticed his numerous changes in banking connections and have drawn the conclusion that the debtor must keep such a poor account that no bank will retain it. With each succeeding change, the desired credit becomes harder to get.

On the other hand, the bank has respect for the man

who says, "I am considering opening an account with you and will keep a balance of $5,000, but before doing so, wish to have you make a thorough investigation of my credit standing. At certain seasons of the year I am compelled to borrow quite heavily for comparatively short periods, to finance my business. I wish to know that I may count on you for, say, $20,000 on my own note. If you are interested I shall be glad to send you a complete statement and to give you such further information and business references as you desire."

The business man should never approach a bank with a complaint about another bank. It is surprising how many times a man will answer the question: "Why are you closing your account at the X bank?" with "Oh! They did not treat me well over there." No bank will allow a good account to slip away from it. The suggestion always raises a question in a banker's mind, and he can think of only two reasons for the change that is being made. One is that the account is undesirable to the bank now having it, and the other that some unpleasant circumstance has happened which has not been satisfactorily explained, and that the customer is piqued about it. In any case, the impression left in the mind of the officer is likely to be unfavorable. In the Dominion of Canada, no bank will take an account from another bank without its permission and the depositor who feels hurt about some trivial matter and tries to open an account in another bank may find himself without banking connections.

17. *Partnership accounts.*—Unless well known to the officers of the bank, all the members of a firm should present themselves, when opening an account, in order that the conditions under which the account is to be handled by the bank may be thoroughly understood from the

start. If the signatures of the partners are known to the bank officers, one partner may open the account and take the signature cards away with him to be signed by his partners. Partnerships should co-operate with the bank by giving prompt notice of change in the partnership agreement.

18. *Corporate accounts.*—The opening of an account for a corporation is handled in a different manner. A corporation, though composed of individuals, is treated, under the law, as an entity. The acts of a corporation are not the acts of the individuals composing it, but of the corporation itself. Corporations may not exceed the powers granted to them by their charters. It is necessary for the banker to know, in accepting an account, that he is undertaking a responsibility that can be supported legally.

The first thing the banker must know is, whether the persons assuming to act for the corporation, are properly authorized to do so. This authority is conferred upon the officers of the corporation either by the by-laws or by specific resolutions of the board of directors. The bank officials will require the officers of the corporation to file with the bank a certified copy of the by-laws or certified extracts from the minutes of the board of directors, or both, showing the authority of the officers to open an account, and to withdraw funds. The certification of the extracts is a very simple matter and is given by the secretary of the corporation, who states at the foot of the extracts:

"I hereby certify that the above is a true and exact copy of the by-laws (or minutes) above quoted."

To this he affixes his signature and seals the document with the seal of the corporation.

A careful bank officer may require, in addition, a signed statement by the secretary of the corporation, that the officers for the current year are those seeking to open the account.

19. *Fiduciary accounts.*—A fiduciary is one who is acting in a trust capacity for another. A fiduciary account, therefore, is an account opened by a person acting as agent, attorney, executor, administrator or trustee for another person. Banks are not always as careful as they should be in opening this kind of account. An account in the name of an agent or attorney is one that may cause a great deal of trouble, because it is hard to determine whether the agent is acting at all times within the scope of his authority. Documentary evidence of the creation of an agency is not always obtainable, and might turn out to be a complicated indenture.

Powers of attorney are usually broad in their scope and banks as a rule prefer not to take such accounts if they can be handled in the name of the principal. It often happens that a depositor wishes to delegate authority to use his account either temporarily or permanently. This authority may give the attorney as complete powers as the principal possesses in connection with the account, including the right to indorse notes, checks, drafts or bills of exchange, for deposit or collection. Authority is frequently given to the attorney to borrow money from the bank, to execute, seal and deliver any notes, bonds or other instruments in writing that may be necessary, and to assign as collateral security, stocks, bonds, warehouse receipts or other personal property; also to indorse for discount any paper belonging to the principal. The attorney is usually authorized to draw and accept all drafts or bills of exchange to

be charged to the depositor's account and to waive demand, notice and protest on any notes, checks, drafts and bills of exchange.

In short, a power of attorney executed by a depositor in favor of another gives the attorney the right to perform, in a legal and binding manner, all acts specifically enumerated in the power of attorney.

20. *Estate accounts.*—In seeking to open an account for an estate, an executor should be prepared to show that he is the legal representative of the estate. This is accomplished by securing from the surrogate or from whatever officer is charged with the probate of wills, a certified copy of the letters testamentary and filing them with the bank at the time of opening the account. These letters usually state that letters testamentary were granted in favor of the executor and that they have not been revoked. There is no reason why the bank should require the executor to file a copy of the will of the deceased, but the bank should know whether or not the will provides for the appointment of several executors, and if so, whether there are any special instructions as to the manner in which checks should be drawn.

As a rule, one co-executor may indorse checks payable to the estate or to the executors and may draw checks against an account in the names of several executors. An executor has no power, usually, to borrow money on behalf of the estate or to bind it by a note. The title "administrator" indicates that the deceased died intestate and that "letters of administration" were granted instead of "letters testamentary." The procedure in opening an account is practically the same in both cases.

When an executor has not been appointed or dies or is unable or unwilling to act, an administrator *cum testamento annexo* (c.t.a.) is appointed by the surrogate.

The use of the letters c.t.a. indicates to those who may be concerned that there is a will governing the actions of the administrator.

A trustee is one appointed under the terms of a will, or otherwise, to carry out the provisions of a trust agreement, and although there is possibility of danger in opening an account of this kind, there will be no necessity for filing a copy of the trust agreement, if the trustee is well known to the bank.

21. *Signature cards.*—Many years ago, when a person opened an account with a commercial bank, a large book was opened and the depositor requested to write a sample of his signature therein, together with his address and other pertinent data. This signature book is now practically obsolete. Signatures are recorded on cards, which contain, in addition to the sample of the signature, the address of the depositor, the nature of his business, his telephone number, by whom the account was introduced, and the date of opening the account. The card for corporations is slightly different, the first line being given over to the name of the corporation, which is followed by several lines for specimen signatures of the officers of the corporation, the address, and the nature of the business. A line is always left for instructions regarding the number of signatures that must appear on all checks, drafts and notes, since many corporations require the signature of more than one officer.

The card used for fiduciaries is usually the ordinary card for individuals. Sometimes there is a line or two for special information regarding the nature of the trust relation.

The signature cards and whatever papers are required to show the authority for opening the account and hon-

oring signatures are turned over to the paying teller immediately and are kept in his department. A great deal of care is taken to see that these signature cards do not get into improper hands. They are always kept under lock and key and frequently are carried into the vault at night.

In connection with the signature cards there should be mentioned, in passing, the finger print method of identification, not because it is of importance in commercial banking, but because inquiries are frequently made regarding it. Scientists maintain that no two individuals have the same markings on the finger tips and that if a record is made of these markings, it is impossible for anyone to imitate them. The impression of these markings is made by touching the fingers lightly on a glass plate which has previously been inked, and then pressing the fingers on a card or whatever document is to bear the impression. It is manifestly impossible for this method to be used in any but a savings bank. No business man would be willing to keep the necessary equipment on his desk or to soil his fingers and cleanse them every time he was asked to sign a check.

22. *Pass books.*—It has been the general custom to issue to the person opening an account a pass book, in which the total of the first and subsequent deposits are entered. The pass book gradually is being regarded more and more as merely a receipt for deposits made. Formerly, it was the general practice to balance the pass books at frequent intervals, by entering the checks in the book as well as the deposits. The methods employed in balancing pass books, past and present, will be discussed fully under the head of deposit records.

The business man should not feel annoyed because

the bank officer insists upon careful attention to the details connected with the opening of an account. On the contrary, he might well become distrustful if they are not carefully attended to. Banks that are careful to secure all necessary facts and papers at the time the account is opened and to satisfy themselves that the business will be a credit to them, are likely to be careful of the details after the account is opened. It would be well, if carelessness is displayed in this matter, to seek other banking connections.

CHAPTER III

DEPOSITS

23. *Composition.*—A deposit may consist of many kinds of items: gold, silver, currency, clearing house checks, local non-clearing items, checks payable in other cities, checks on selves,[1] certified checks on selves, cashier's checks and coupons. The gold, silver and currency follow the same path in the bank, certified checks on selves and cashier's checks go in channels which are similar, but each of the other items demands different treatment. It is the purpose of this chapter to give the depositor a mental picture of the operations required in each case, so that he may appreciate the consideration given to each item by the banker when estimating the value of his account to the bank.

24. *The deposit slip.*—The form of the deposit slip may be simple or it may be quite complex. An example of the simple slip is shown in Figure 1 and of the complex in Figure 2. The first slip is generally used; the other, shown in Figure 2, is used by many progressive banks, chiefly in the Middle West. The classification of deposits by the depositor makes it possible for the receiving teller to figure the exchange—the charge made for collecting out-of-town checks—more quickly and thus saves time for the depositor at the window. Its special purpose is to facilitate the work of the analysis department by showing at a glance the portion of each deposit that consists of cash, exchanges for the

[1] Checks on selves are checks drawn on the bank in which they are deposited.

DEPOSITED BY

_____ _____ 191____

IN

THE CORN EXCHANGE BANK

PLEASE OMIT ALL DOLLAR SIGNS

SPECIE			
BILLS			
Ch'k on Bank,			
"			
"			
"			
"			
"			
"			
"			
"			
"			
"			
"			
"			

CHECKS CREDITED SUBJECT TO PAYMENT

FIGURE 1

DEPOSIT SLIP—SIMPLE FORM

DEPOSITED WITH

CONTINENTAL AND COMMERCIAL NATIONAL BANK

OF CHICAGO

FOR ACCOUNT OF

_____ 191__

Checks on This Bank	Dollars	Cents	Checks and Drafts on Other Towns and Cities	Dollars	Cents	Checks and Drafts on New York City	Dollars	Cents
Checks on other Chicago Banks								
			TOTALS on this Bank					
			" " Chicago					
			" " Outside					
			" New York City					
			CURRENCY					
			Silver					
			Gold					
			FOOTING					
			Less Exchange					
			NET CREDIT					

FIGURE 2

DEPOSIT SLIP—COMPLEX FORM

clearing house and out-of-town items. It also facilitates the work connected with cost-keeping by making it possible to count the number of items of each class deposited, by means of which is determined the proportion of overhead expense applicable to each account.

The amount of the deposit is entered in the pass book by writing in the first column the date the deposit is made, in the second the initial of the officer or teller who receives the deposit, and in the third the amount of the deposit.

"Checking off" the items deposited consists in examining them for indorsements and comparing the amounts shown on the checks with those listed on the deposit slips. At the time of making the comparison, a mark of some kind is made on the slip for future reference. This record, while hastily made, is useful in a great many ways. Modern methods of routing the items through the bank are eliminating this initial checking off.

25. *The receiving teller's proof.*—One of the interesting things about a bank is that each department in the bank must make a proof of the day's work. In other businesses, the only department that makes a daily proof is the cashier's department. The receiving teller makes his proof by finding the total of all the deposits made by the depositors, then listing and adding together all the items of various kinds which he receives, and counting the cash. The sum of the various items and the cash must, of course, equal the total of the deposit slips. If there is a difference, it must be found before the clerks in the department are allowed to go home. This difference may occur in any one of a dozen ways. A depositor may have listed incorrectly an item on the deposit slip, and the teller may have failed to notice it as he checked off the items. The depositor may

have counted his cash wrongly and the teller may have missed the error. The slip may be added incorrectly. Before the days of the adding machine, a clerk might have listed an item wrongly on any of the slips and might have made mistakes in adding, but nowadays all listings of any length are made on adding machines. The operators, however, are not free from making mistakes in listing, so differences may occur even when machines are used. With this method of proving, it is essential to list practically every check twice, in order to be sure that the listings are correct.

26. *The "batch" system.*—A new system of proving, especially in the tellers' work, has lately come into favor. It is called the "batch" or "block" system. Under this method of proving, much useless work is avoided. The teller checks the cash with the deposit slip in the usual manner as soon as he receives it, but instead of checking off the various items as listed on the slip, he lays the slips and checks to one side until a sufficient number have accumulated to make up a batch. The assistants then take the deposit slips and examine the checks for indorsement, that is, they find out if the depositors have indorsed every item deposited. This examination is essential, for if a check should pass through the books of a bank and be returned unpaid at any time, it would be impossible to tell to whom it belonged, if it happened to be made payable to some one other than a depositor. It is also considered good practice for the clerks to examine the checks carefully at this time to see if the indorsements preceding that of the depositor are regular, so that any errors in indorsing may be corrected immediately, saving the delays incident to sending the check through a second time.

After examining the checks for indorsement, the clerks sort them into the various groups to which they belong. Checks payable through the clearing house are put into one stack, those payable out of town in another, those payable at local non-clearing banks in another, and checks on the bank itself and cashier's checks is still another. After having been sorted into various groups, the checks are listed on an adding machine and a carbon copy is taken of the list. The clearing house items are further sorted out according to banks and a list is made for each bank. The carbon copies of the lists are filed for future reference.

The checks are indorsed by a special machine while they are being listed. The machine to indorse the checks may be a part of the adding machine itself or a machine used in conjunction with it. It is a mechanical device by means of which the checks are indorsed as they are listed, advantage being taken of the operation necessary to pick a check up when listing, to add the indorsement at the same time, thus saving one operation.

The totals of the lists thus made, together with the total of the cash in the receiving teller's drawer, which must be removed at the time the clerks take away the deposit slips and checks, must equal the amount of the deposit slips from which the checks and money were removed. If they agree, the work is said to be proved at that point, and the checks are passed to the clerks responsible for further work upon them. Some tellers do not actually count the cash but make a list of the items recorded as cash on the deposit slip and use the figure thus obtained in the proof.

At the close of the day, several proofs having been made in this manner, it is a very simple matter to close up the work and pass the entries to the bookkeepers.

The teller credits depositors with the total of the deposits received by him, less exchange deducted, which is credited to exchange account. He charges cash with the total of the cash received and the total of the items payable through the clearing house. The latter account is usually carried under a separate title and reported in the daily statement as "Exchanges for the clearing house." The receiving teller also charges "Individual deposits" with the total of the checks received on his own bank and "Certified checks" with the amount of certified checks on selves received. He charges the transit department or an account on the general books known as "Due from other banks, bankers and trust companies" with the amount of the items payable out of town.

27. *Indorsements.*—When a check is once separated from a deposit slip it is a very difficult task to trace it, unless the indorsements are complete. It is necessary, therefore, that the receiving teller see that all checks received by him bear the indorsement of the depositor.

The receiving teller must know what is a good and what is a bad indorsement, and decline to receive such checks as may be returned because of incorrect passing of title. The depositor can help a great deal in this matter and save endless trouble in the handling of his account if he is informed regarding the various kinds of indorsements and the ruling thereon. Tompkins[1] defines an indorsement as follows:

> Indorsement is the writing of the name of the indorser on the instrument with the intent on his part either to transfer, or pass the title to the instrument; or to add strength to the security of the holder by assuming a contingent liability for its future payment. This latter is called accommodation indorsement.

[1] *Law of Commercial Paper*, L. J. Tompkins.

The indorsement must be written on the instrument itself, or upon a paper attached to it. A piece of paper so attached to a negotiable instrument to give room for new indorsements is called an "allonge." This allonge is more frequently seen on foreign bills of exchange than on domestic. The reason is that indorsements made with a rubber stamp, as is done in this country, are not, as a general rule, acceptable in other countries.

28. *Kinds of indorsements.*—Indorsements may be made in one of four ways: (1) Blank; (2) Special; (3) Restrictive; (4) Qualified.

A blank indorsement is one that assigns title to the instrument by merely signing the name of the payee, without words of qualification.

A special indorsement is one that specifies the person to whom, or to whose order the instrument is made payable.

A restrictive indorsement is one that makes the indorsee the holder of the instrument, but not the beneficial owner of it. This gives the indorsee the authority to deal with the instrument as specified in the indorsement but does not transfer to him the ownership of it. The usual form of restrictive indorsements is "pay X for order for collection," or "pay X for order for my use." In the foregoing forms, X is merely the agent of the indorser. The New York Clearing House has prohibited the use of this indorsement unless the paper is guaranteed by the bank presenting it. Another form of restrictive indorsement gives the indorsee only the right to negotiate the instrument for the benefit of the party named in its indorsement. The forms are "pay X or order for account of A," or, "pay X or order for credit of A."

A qualified indorsement is one which limits the ordi-

nary liability of the indorser. He becomes the mere assignor of the title. It relates only to his liability, and does not affect the negotiable character of the instrument. Such an indorsement is found in the addition of the words, "without recourse," to the regular indorsement. The words, "without recourse," mean that a person so indorsing wishes to incur no liability as an indorser, but wishes simply to transfer the title. Another form, less generally used, is found in the words, "at the indorsee's own risk."

NOTE.—The subject of indorsement is discussed very fully in Volume XII of the Modern Business Series in Chapter XVIII. The interested reader of this text would do well to review Chapters XVI to XXI inclusive, covering negotiable contracts, in the volume above referred to.

CHAPTER IV

DEPOSITS—*Continued*

29.—*Counting the cash.*—Some banks receive a large amount of cash. If received regularly it is easy to organize a department to handle it, but if received intermittently, the task of handling the unusual volume—the peak load—is burdensome. So little gold is used in this country, in the ordinary course of business, that it gives the banks very little trouble. Counterfeits are not numerous and they can readily be detected if a money scale is used. These scales have special weights for each American gold coin. The greatest danger in handling gold is the loss that may be occasioned by receiving light-weight coins. The treasury department will not accept gold coins at full value if they fall more than one-half of one per cent below the standard weight. Moreover, when such light-weight coins are presented for redemption to the treasury department, it immediately renders them unfit for circulation by stamping the letter "L" upon them. The stamping process mutilates the coins, so that they are fit only for melting down and recoining or for casting into bars. The holder of light-weight coins thus loses the difference between the coin value and the metal value of the gold. The loss averages about three per cent of the total value of gold handled.

30. *Silver and minor coins.*—Subsidiary silver, that is, halves, quarters and dimes, is put up by the treasury department in bags of $1,000 each; nickels, in bags of

$200; and cents, in bags of $10. The following practice with reference to rolling coins for current use has been established: halves, in rolls of $10 each; quarters, in rolls of $10; dimes, in rolls of $5; nickels in rolls of $2 each; and in a few instances of $1; and cents, in rolls of 50 cents each.

If much coin is received and paid out by a bank, it makes use of a coin-counting machine. These machines are wonderful pieces of mechanism. They discard mutilated and counterfeit coins and count and wrap the coin in rolls of the proper number. One of the coin-counting and wrapping machine companies has been using and selling standard colors of paper for the various denominations and amounts ever since the machine was first put on the market. After the coin is rolled, it is stored in the vault, in boxes of convenient size and shape. Some banks request their customers not to roll coins received in large amounts, but to allow the bank to make the count and roll it as it is received.

31. *Currency.*—It is the custom among banks to arrange all kinds of currency into packages of fifty bills no matter what the denomination. Thus if a bank man sees a package of five dollar bills on the table, he instantly knows that the package contains $250; if tens, $500; twenties, $1,000, etc. Two dollar certificates are not in demand and are usually mixed with the one dollar certificates in order to get rid of them, so that the rule above stated will not always hold with reference to one and two dollar bills. These smaller denominations are usually wrapped in packages of $50 or $100 each.

Many business men do not appreciate the fact thrust upon bankers, that there are many kinds of bills issued by the United States Government, and that each has a definite value in the vaults of a bank. Briefly stated,

the kinds of bills in use are as follows: (1) gold certificates; (2) silver certificates; (3) United States notes or greenbacks; (4) national bank notes; (5) treasury notes; (6) federal reserve notes. A national bank is not permitted to consider the national bank notes or the federal reserve notes as a part of its reserve. Therefore, as soon as currency is received these notes are at once separated, so that the total may be obtained and deducted from the total cash if a call is made for a report. The relative value of the other kinds of currency is discussed in Part I of this volume and need not be reiterated here.

It is the custom in banks to sort bills with the front side up. Cashiers of large business houses are sometimes careless in this respect and deposit large quantities of money with bills badly arranged. The bank teller sorts and arranges all bills before he puts them in his money drawer, instead of counting them as they are turned in to him, because, in rapidly counting money, it is necessary to be able to recognize the bill, not merely from the figure representing its value, though the number stands out prominently on all parts of the bill, but by the general character and appearance. If he always counts money face up, he has just one-half the number of outlines to remember, as he does when the bills are arranged promiscuously. He is more likely to detect counterfeits if he knows the face of the bill thoroughly, than if he tries to remember both the face and the back.

The teller counts the money and sorts it into denominations before entering the deposit in the pass book. He then distributes the bills into his money drawer, which is divided so as to provide proper spaces for each denomination. When a large amount of cash has accumulated, his assistants count each denomination into

packages of fifty bills each and then strap them for use. These packages are ultimately assembled into bundles of one thousand bills each and labeled.

Here again we find the value of uniformity. The bundles of one dollar bills amount to $1,000, the bundles of five dollar bills amount to $5,000, the bundles of ten dollar bills amount to $10,000, etc. The loose currency of each denomination that is left over after the packages have been made up by the assistants is put together in one bundle and marked "miscellaneous." The amount is noted on a strap put on the outside of the bundle. The paying teller is the custodian of a bank's cash and the entire cash is turned over to him after the close of business, or before the opening of business on the morning following. The general practice is for the receiving teller to hold his cash over night, locking it in a vault compartment particularly assigned to him and handing it to the paying teller before the opening of business on the day following. Although the amount is held by the receiving teller, it enters into the cash of the bank, just as if it were actually in the paying teller's hands.

32. *The clearings.*—Technical terms creep into banking just as into any other business. Many technical bank terms originate in the clearing of checks. The term "clearing" is itself peculiar to banking. "To clear" means to pass items through the clearing house, or to settle amounts by exchange of checks. Instead of collecting from each individual bank all the checks and drafts drawn against it and deposited with the bank having them in its possession, the operation is simplified by taking them to a clearing house, as explained in Part I. The other banks follow the same procedure. Only the net balances are paid to or collected from the clearing house. The word "clearings" is used to desig-

nate the total of these balances at the clearing house. Bank clerks speak of the items to be sent to the clearing house as "exchanges." There are many other terms, but these will be sufficient for us to make a rapid survey of the work connected with the preparation of the "exchanges" for the clearing house in the receiving teller's department.

Unless the batch method of proving the receiving teller's department is in use, the preparation of the items for the clearing house involves the following work: First, the items are "checked off" the deposit slips and a notation made on the slip, of the number of the bank where they are payable, if in the same city as the receiving bank. All clearing house banks are numbered and their names are known by the clerks in all banks by these numbers. It is as customary to hear the National City Bank of New York spoken of as "number 8" as it is to hear it called "The National City Bank"; the Chase National Bank is known quite as well among New York bank clerks as "74" as it is by the name "Chase National."

After all the items have been checked on the deposit slips, they are indorsed. This indorsement is really a receipt put upon the back of the check with a rubber stamp and usually reads "Received payment through the New York Clearing House, March 15, 19—, Chase National Bank No. 74."

After having been indorsed the checks are sorted into what is called "the rack." The rack is a stack of pigeonholes, one for each bank in the clearing house. When a bank clerk is spoken of as being "on the rack," it does not mean that he is being subjected to some terrible punishment, savoring of the Middle Ages, but that he is being tortured in a more modern way by being com-

pelled to prepare a tremendous mass of items for the clearing house.

After having been indorsed and sorted, the checks are listed, first on slips which accompany the checks to the bank on which they are drawn, and again on sheets or some other suitable record which is retained by the bank in which the checks were deposited. The totals found on each slip are compared with the totals found against the particular bank on the sheet. A summary is made of these totals on the sheet. This is the figure that enters into the receiving teller's proof and is known as "items for the clearing house," or "exchanges." This process is simplified when the "batch" method previously described is used.

33. *The "Duplex" adding machine.*—In listing the items for the exchanges and otherwise, banks find it desirable to use a machine which will give separate totals for each bank on which the items are drawn, and at the end of the entire work, to have a total of the whole. This can be accomplished by using what is commonly known as the "Duplex" adding machine. This machine makes it possible to start listing at any time, and to take a total of a number of amounts, the total so obtained being carried in the machine, while another listing is made, and a new total obtained on the second listing. This total is also carried into the machine and held until the entire work is done, when the grand total of all the checks so listed can be obtained.

The items payable in other cities, called transit items, are listed under the old method or under the "batch" method and turned over to the transit department. The indorsing machine may be used in either method. The items payable at the bank itself are listed in the same manner, also the items payable on other local banks.

34. *Transit checks.*—Let us assume that the items are listed under the batch method, and then trace them to their ultimate destination. The first thing that must be done is to allow the clerks of the analysis department to make a record on analysis sheets of the out-of-town items deposited by the various customers. The clerks refer to the last indorsement and enter each item on sheets specially prepared. These sheets are kept in suitable files or binders, one for each depositor whose account is subject to analysis.

As soon as the analysis clerks have finished with the checks they are routed by the clerks in the transit department. The routing consists in sorting the checks according to the places to which they are to be sent for collection. It must be remembered that the collection of items payable at other cities involves the creation of collection relations. Banks in the large cities make arrangements with banks in other cities to receive all the items they can send payable in a certain territory and credit them as cash, or charge a rate for collection that is satisfactory to both banks. The larger the bank, the more complete is its collection service and the more prompt the returns to the depositor.

35. *Indorsing transit items.*—After the items have been routed, they are indorsed to the bank to which they are to be sent. Practices differ in this respect. Some banks indorse all their transit items "Pay to any bank, banker or trust company." Practically all large banks indorse transit items specially; that is, to the bank to which they are sent. Some banks indorse the transit items in the receiving teller's department when listing the checks on the adding machine, and leave room in the indorsement itself for filling in the name of the bank to which the items are to be sent.

86. *Transit letters.*—When the items have been indorsed, they are turned over to the clerks for listing on the letters with which they are inclosed to the collecting bank. These letters contain all necessary instructions to the bank receiving them including the names of the paying banks and such special instructions as may be needed. A carbon copy of the letter is kept by the sending bank and on this carbon is made a memorandum of the name of the customer who deposited each item. Banks which have a large collection business, assign numbers to the depositors having a great many items payable out of town, giving them a rubber stamp for indorsing the items. The number so assigned is prominently displayed on this indorsement stamp, so that it is possible for the clerks in the transit department to record the number so given to a depositor, instead of writing out his name in full. This saves time and is much more efficient than attempting to write down the name of the depositor.

87. *Transit proof.*—After the items have been listed on the letters, the letters are added and a summary of the totals is made. The total of the letters must agree with the totals of the items sent to the transit department by the other departments in the bank.

The total of each letter is posted to the debit of the account of the bank to which it is sent. The summary of the letters is sometimes made by means of this posting in a combined ledger and journal.

88. *Time-saving methods.* — Many time-saving methods and devices have been introduced in the transit department. The items are listed by means of machines to a very large extent. The batch proving system is used in many progressive banks in the transit department, as well as in the teller's department. When the

proof is made, that is, when the totals of the letters agree with the totals of the items charged to the transit department, the checks and the letters are inclosed in envelopes, properly addressed, the envelopes sealed, and mailed. This inclosing and mailing is an important part of the work and is usually assigned to responsible clerks.

39. *Checks returned unpaid.*—If the items so sent to other banks are paid, nothing more is heard of them, except that the total of the letter has been credited to the account of the bank which sent it, or that the proceeds are sent by draft on New York or Chicago, or some other important city. If payment on any item is refused, it is protested, charged back and returned to the bank sending it. The transit department must then notify the depositor of the dishonor of the item and in turn charge it back to him, crediting the bank from which the item was originally sent. Practices differ with reference to the manner in which these unpaid items are reported to the depositor. Frequently a depositor is notified and requested to call for the item, or to give instructions regarding it. In other cases, the item is charged and mailed immediately on receipt. The best method is to charge back and return the items immediately by mail. This keeps the depositor's account nearer a cash basis and notifies him promptly of the returned items.

40. *Federal reserve collecting.*—The clauses in the Federal Reserve Act relating to the deposit of checks are as follows:

Section 13: "Any Federal reserve bank may receive from any of its member banks, and from the United States, deposits of current funds in lawful money, national-bank notes, Federal reserve notes, or checks and drafts upon solvent member banks,

payable upon presentation; or solely for exchange purposes, may receive from other Federal reserve banks deposits of current funds in lawful money, national-bank notes, or checks and drafts upon solvent members or other Federal reserve banks, payable upon presentation."

Section 16: "The Federal Reserve Board shall make and promulgate, from time to time, regulations governing the transfer of funds and charges therefor among Federal reserve banks and their branches, and may, at its discretion, exercise the functions of a clearing house for such Federal reserve banks, or may designate a Federal reserve bank to exercise such functions, and may also require each such bank to exercise the functions of a clearing house for its member banks."

It is expected that the Federal reserve banks will take care of a large part of the collection business of the country. Inasmuch as practically all the national banks in the country have joined the system and many state banks and trust companies will do so ultimately, it will be possible for one bank to deposit in the Federal reserve bank of which it is a member all the checks and drafts it has upon banks in various parts of the country. Checks and drafts payable in the district in which is located the Federal reserve bank of which the sending bank is a member will be sent direct to the paying bank. It is generally understood that they will be charged when sent. Checks and drafts payable in any district will be sent to the Federal reserve bank in that district, which will in turn send them to the paying banks. It is possible that, when the Federal reserve banks are allowed to open branches, still more direct returns may be had from the Federal reserve banks for the collection of transit items.

41. *Collecting non-clearing items.*—Local non-clearing items, which include checks upon banks not members

of the clearing house and upon bankers, must be presented by hand. This work is usually attended to by the note teller, who has many other items of like character to collect.

The usual bank routine of getting a proof on everything before it leaves the bank is observed in this work too. It is considered to be good training for young clerks to make proofs of the items they are sent to collect, by having them make an independent listing, comparing the total with the total obtained through a separate listing made by another clerk who is responsible for the returns to be received from the boys. Here again the batch method of proving this work may be applied to advantage, and one of the listings saved by taking carbon copies of the lists of all of the routes given to the boys and proving the total of all of the lists with the totals of all of the items charged to the messenger department by other departments. Before the boys leave the bank, the items are stamped paid and sorted into routes for convenience in collecting. The boys present the checks or drafts, receive in payment cash or checks to the order of the bank and deliver the items. The checks received must be drawn on clearing house banks, or the process would have to be repeated on the day following. Certified checks are not always demanded from responsible houses.

42. *Coupons.*—The collection of coupons has always been a source of annoyance and now that the Income Tax Law requires certificates of ownership to be attached to each coupon, the burden is still greater. Omitting details, the coupons are listed and properly proved before being sent out. The messenger receiving the coupons is required to receipt for them by initialing either in a book or in some other satisfactory record.

The messenger presents the coupons to the corporations or to their fiscal agent and receives either cash or checks payable to the order of the bank. These checks are sent to the clearing house in the same manner as other checks deposited over the receiving teller's window.

43. *"Checks on selves."*—Checks on selves, or home debits as they are more generally called, are sent to the bookkeeping department with a list. The bookkeeper sorts the checks for convenience in posting and enters them against the accounts of the depositors. When the bookkeepers have completed their postings, the checks are sent to the paying teller, who passes upon the signatures. They are then sent to the statement clerks for posting on the statements and finally to the check files to be cut, that is, mutilated so they cannot be used again, and filed. The checks are delivered to the depositor when his book is balanced, or when a statement of his account is rendered. The checks are always examined before being paid to see that there are no instructions on file to refuse payment—commonly called "stop payments"—recorded against them, and also to see that they are properly dated and that the amount written out in the body agrees with the amount stated in figures.

Certified checks drawn on the bank and cashier's checks are sent to the general bookkeeper or the auditor, and a notation of their payment made in his record. They are charged to the account bearing their name, thus cancelling the liability set up at the time the checks were certified or issued.

44. *Cash items versus collection items.*—It may be well at this point to explain the differences between "cash items" and "collection items," as the terms are used very often in bank work. A cash item is one that is accepted

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the same as cash and credited to the depositor at the time the deposit is made. In some parts of the country cash items payable in other cities are called "transit items." A collection item is one that is left with the bank for collection and credited when the returns are in hand. Drafts upon individuals, items not yet due, items on which special advice is required, are taken for collection. Cash items are lost track of immediately after they enter into the work of the receiving teller's department, or any other department, and they are not heard from again unless they are returned unpaid. Collection items are recorded through every step of their progress and definite returns are made on each item. Checks payable through the clearing house are not often taken for collection. If a depositor wishes to be assured that an item payable through the clearing house is paid, he should himself have the item certified before depositing it. He will then know that it will be paid on presentation, if properly indorsed, and his bank can tell him if the indorsements are correct at the time he is depositing the item. This general distinction should be borne in mind by the depositor and when he is in doubt about any item, he should request the bank to take it for collection, so that both the depositor and the bank will know whether or not the item is actually paid.

Drafts of various kinds constitute an important part of the collection work. Drafts are bills of exchange drawn by one individual or firm upon another individual, firm or company payable to the order of the drawer or some third party. They may be payable on demand, or on a number of days' sight, or on time. They may have bills of lading covering a shipment of goods, or other papers of almost any character attached, to be delivered to the drawee only on payment of the draft.

They may have instructions accompanying them, to deliver the documents attached on acceptance of the draft.

Local notes are usually left for collection a number of days before they are due. The bank keeps track of the notes and presents them for the account of the depositor. If paid, the proceeds are credited to the depositor's account. If unpaid, they are protested and the depositor advised.

Coupons not due are also received for collection and presented on the day they are due. If paid, credit is given in the same way as for any other collection item.

The local collection items are taken care of by the note teller. He keeps a memorandum of the items, their due dates, the name of the owner and such other data as may be pertinent. He sees that the items are properly presented on the day they are due and credit and advice given to the depositor.

Collection items payable out-of-town are taken care of by the collection clerk. Sometimes this work is done by a division of the transit department. Wherever the work is attended to, it is collection work and the man who is doing it is really the collection clerk.

Collection items are usually received by the collection clerk and a memorandum is made in the depositor's pass book of the item so received. Before they are sent out a record is made in the collection register and numbers are given to the items. From that time on, each item is known by its collection number. The collection register gives a full history of each item, the name of the maker, the name of the drawee, the place where payable, the date, the name of the depositor, the amount, etc.

The items are sent to correspondent banks in the neighborhood of the bank where they are payable, with a

letter enclosing them for collection, giving the collection number and requesting return, sometimes by credit, and other times by draft.

It is necessary for the collection clerk to have an accurate tickler or diary. Sometimes the letters are made up in triplicate and one of these copies filed behind date cards, thus saving one record.

When returns are received from the bank to which collection items were sent, the proper entries are set up, charging the collection bank and crediting the depositor. The depositor is advised of the return and the credit to his account.

CHAPTER V

DEPOSIT RECORDS

45. *The individual ledger.*—The individual ledger of a bank corresponds to the customers' ledger in a commercial concern. In it are kept accounts with depositors—the bank's principal customers. The record shown on the ledger is not always in detail; subsidiary books are employed to assemble the detail before posting to the general ledger. It is essential, however, that the ledger be kept in such a form that the bookkeeper can tell at a glance the exact state of a depositor's account, the balance to his credit and the general character of the latest deposits, so that he will be able to analyze the balances quickly and tell without delay, whether or not a check which is before him should be paid.

The total of the balances standing to the credit of the various depositors, as shown on the individual ledger, is carried in one or more accounts in the general ledger. These general ledger accounts correspond to the controlling accounts discussed in Volume VI. Sometimes there is only one such account showing the total amount due all the depositors; more often there is a separate account for each individual ledger. The individual accounts are arranged in alphabetical order.

46. *Daily proving.*—The banker is presented with a peculiar problem in designing his accounting system. He must know at any moment of the day, frequently many times a day, the exact amount to the credit of any depositor. Thus, it is essential that frequent proofs

be made to insure accurate postings and striking of balances. Proofs of the individual ledgers are made daily in all banks doing a commercial business. Banks conducting a rather inactive business do not feel the need of proving the ledgers daily and so make use of forms which give them more information than those used where daily proofs are desired.

As a rule, bank ledgers are devised with the following points in view: ease of posting, readiness with which depositors' balances may be obtained, and ease with which the proofs may be made. It is evident that if one were to take the old form of ledger with one account to a page, with columns on the left side for debits, on the right for credits, the balances being struck in pencil, it would be a difficult task to list all of the balances and find the total, daily. There are so many opportunities for making errors that the task would almost be impossible. The first improvement in this ledger would be to place the debit and credit columns side by side and to add a balance column. A Boston bank bookkeeper devised a ledger called the Boston Ledger, which is peculiarly adapted to bank work and which is now in use in most commercial banks.

In making daily proofs, the first essential is to group the accounts and prove them by sections, thus localizing errors. This is accomplished by carrying a number of accounts on the same page and tabulating the debits, credits and balances in columns in the manner shown in Figure 3. From twenty-five to thirty-five accounts are placed on a folio and a week's work is shown across the two pages, by having columns in each day for "checks in detail," "total checks," "deposits" and "balance."

In the figure, the first amount, $7,568.32, in the "balance" column represents the amount to the credit of

	Monday, Sept. 15, 1913										Tuesday, Sept. 16, 1913				Thursday	
	Checks in detail				Total Checks		Deposits		Balance		Checks in detail		Total Checks	Deposits	Balance		Balance other Columns omitted	
John Ackerman	150		98	32														
	75	32	129	76														
	87	50	42	50														
	125		129	37			1376	87										
	87	50	48	75	*85		L 5000											
	176	87	*75		1150	89	C 100		7568	32					12809	30		
Luther Benson			*10															
	100																	
	50				*15		D 1000											
	10	50			160	50	700		876						2400	50		
Irving Camp	400		98	75														
	1500		187	72														
	475		98	37														
	78	50	875															
	98	30	*178	50	*208	50	B 5249	25										
	175	10	*30		3986	74	100		10975						12129	01		
R. S. Douglas					150				1500						1350			
P. L. Easton					100				50						*50			
															28688	81		
					*308	50									*50			
					5548	13	13526	12	20969	32					28638	81		

L = Loan. D = Discount.
C = Collection. B = Sale of Bonds.

FIGURE 3.
BOSTON LEDGER.

John Ackerman on the opening of business September 15, 1913. Immediately to the left of this column we find in the "deposit" column $1,376.87 representing an ordinary deposit. We also find $5,000 marked "L" representing a loan made to him by the bank and $100 marked "C" representing proceeds of an item left with the bank for collection and credit when paid. These are all entered in black ink. The items (except the last two which are starred), in the column to the extreme left, headed "checks in detail," represent items paid through the clearing house. The total of these terms, $1,150.89, is also entered in the "total checks" column. The two items starred are entered on the ledger in red ink and the total carried into the "total checks" column. These are entered in red ink to show that they are paid over the bank's own counter, either at the paying teller's window in cash, or credited to the account of some other depositor through the receiving teller's department.

At the close of the day the bookkeeper adds the balance $7,568.32 to the items in the "deposit" column and deducts the total of the amounts shown in the "total checks" column and strikes the difference between them in the "balance" column of the day following. This new balance is $12,809.30. He does this with each account and arrives at the balance after the close of business September 15th.

In striking the account of P. L. Easton, he finds that the total of the checks paid during the day is $50 in excess of the balance to his credit. He enters this in the "balance" column of the day following in red ink, so as to indicate that it is an overdraft.

If there is a difference, the bookkeeper may localize the error to a given page by adding together the credits

	Monday, Sept. 15, 1913						Tuesday, Sept. 16, 1913						Wednesday, Sept. 17, 1913					
	Debits			Credits			Debits			Credits			Debits			Credits		
John Ackerman	1	*85 150	89	1 L 5 C *7	376 000 100 568	87 32				*12	809	30						
Luther Benson		*15 160	50	D 1	000 700 *876					*2	400	50						
Irving Camp	3	*208 986	50 74	B 5 *10	249 100 975	25 				*12	129	01						
R. S. Douglas		150		*1	500					*1	350							
P. L. Easton		100			*50			*50										
	5	*308 548	50 73	13 *20	526 969	12 32		*50		*28	638	81						

L = Loan. D = Discount.
C = Collections. B = Sale of Bonds.

FIGURE 4.
SKELETON LEDGER.

in the "deposit" column and debits in the "total checks" column, and striking the difference between the two to find the sum of the balances in all of the accounts on that page. If there is a difference, it will be disclosed in this striking and can be very quickly found. If the error is in posting to his ledger, he may determine whether or not this difference is in the debits or credits by adding together the totals of the various debit and credit columns and comparing with the sum of debits and credits made to the account on the general ledger controlling his individual ledger.

The bookkeeper then adds together the new balances and compares the total with the general ledger. If they agree, his ledger is said to be proved. With a ledger of this kind, a bookkeeper can handle all the debits and credits and keep the records of five hundred to seven hundred accounts, depending upon their activity.

The Boston ledger has been still further condensed to the form shown in Figure 4, which is known as the skeleton ledger, in which checks in detail and balance columns have been omitted. The operation is the same as the Boston ledger, except that details of debits are compiled in another book called the "scratcher" or "debit book."

With either of these ledgers in use it will be seen that the bookkeeper is continually informed regarding all of the accounts under his charge.

47. *A machine-kept ledger.*—Another modification of this ledger kept entirely by machine, is shown in Figure 5. This ledger must not be regarded as a typical bank ledger because it is not in general use. It does show some very interesting features and is introduced in this book, because it is felt that perhaps it may offer suggestions to men in other lines of business.

This ledger is loose-leaf and is a combination of ledger and journal. No pen is used. It is posted and proved automatically and is very efficient in its operation. The names of the accounts are struck on the page by means of an addressing machine. The sheets are handed to the bookkeeper with these names upon them. He strikes the balances in the following manner: With the sheet shown at the bottom of the page in the machine and set at a point so the keys will strike in the "A. M. balance" column on the line of John Ackerman's account, he takes the sheet of September 15th and enters the A. M. balance at $7,568.32 and the total credits at the extreme right $6,476.87 and then shifts the carriage of the machine to another position and lists to the $85 shown in the "total debits" column and the $1,150.89 and strikes the balance of $12,809.30. He repeats the process for the other accounts on the page and then finds that his machine has calculated the total. The postings are clearly shown on the ledger and need no further description. The day's postings are also made by machine.

48. *Balancing pass books.*—When a depositor leaves his pass book to be balanced, the bookkeeper, or some other clerk, first adds the credits listed in the book. He then goes to the check files and gets the checks that have been paid during the month and makes a listing of them. He deducts the total of the checks from the total as shown in the pass book and obtains the difference. This should agree with the balance shown to the credit of the depositor on the individual ledger. If the balance agrees, the totals of the debits and credits are entered in the pass book, the balance is written in, the vouchers are strapped into a bundle and placed inside of the pass book, to be handed to the depositor when he calls.

SEPTEMBER 15TH, 1913

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	Name	A. M. Balance	Debits	Debits	Debits	Debits	Total Debits	Credits	Total Credits	
1	Ackerman, John	7568 32	150 00	*75 00			*85 00 1150 89	1376 87	6476 87	1
2	Benson, Luther	876 00	75 32 87 50 125 00 87 50	*10 00 100 00	*15 00		*15 00 160 50	Loan 5000 00 Coll 100 00 Disc 1000 00	1700 00	2
3	Camp, Irving	10975 00	176 87 98 32 129 76 42 50	50 00 10 50	400 00	*178 50	*208 50 3986 74	700 00 Sale of Bonds 5249 25	5349 25	3
4	Douglas, R. S.	1500 00	129 37 48 75 150 00		1500 00 475 00 78 50 98 30	*30 00	150 00	100 00		4
5	Easton, P. L.	50 00	100 00		175 10 98 75 187 72 98 37		100 00			5
	Total of A. M. Bal Agrees with General	ances Led'r 20969 32			875 00 Total of Total of	Home Debits Exchanges	*308 50 5548 13	Total of Credits	13526 12	

All entries on this sheet made by.....
Bookkeeper

* Figures shown in red on ledger.

FIGURE 5 (PART 1).
MACHINE KEPT LEDGER.

SEPTEMBER 16TH, 1913

	Name	A. M. Balance	Debits	Debits	Debits	Debits	Total Debits	Credits	Total Credits	
1	Ackerman, John	12809 30								1
2	Benson, Luther	2400 50								2
3	Camp, Irving	12129 01								3
4	Douglas, R. S.	1350 00								4
5	Easton, P. L.	*50 00								5
	Total Credit Balances	28688 81								
	Overdraft	*50 00								
	Net Credit Balances	28638 81								

Agree with General Ledger

All entries on this sheet made by.....
Bookkeeper

* Figures shown in red on ledger.

FIGURE 5 (PART 2).
MACHINE-KEPT LEDGER.

The balancing of pass books has caused so much congestion at the close of the month, when every depositor wishes to be able to verify his bank balance, that banks have adopted the more efficient method of sending statements to the depositors.

49. *Statement system.*—Many banks are furnishing their depositors with these neatly prepared statements of their accounts. They are prepared during the month, sometimes by hand but generally by machine, and are handed to the depositor the first time he calls after the end of the month, or mailed to him before the clerks leave after the close of business on the last day of the month. These statements show debits and credits in detail and the resulting balance. With the details of his account so clearly set before him, it is easy for the depositor to check the statements with his record shown on the stub of his book, and to see immediately where any differences appear.

Whether a depositor has his pass book balanced, or receives a statement from the bank, he should verify the balance shown by the bank with the balance on his own records without delay, because if claims for discrepancies are not made within a reasonable time after receipt of the book or statement, the courts would undoubtedly hold that the depositor was negligent in not notifying the bank promptly.

50. *Figuring the interest.*—Until comparatively recent years, banks did not allow interest upon deposits. Depositors were glad to leave their money on deposit, for the convenience of issuing checks in payment of their debts. Business men of the present day are likely to invest their money in dividend-paying stocks or interest-bearing bonds, unless interest is paid by the banks on balances left with them. The average rate of interest

paid on business accounts is two per cent on daily balances in excess of stated amounts. The minimum average daily deposit upon which interest is paid ranges from $500 up and depends largely upon the location of the bank and the amount of out-of-town items the depositor gives the bank to collect.

The business man often wonders how a bank figures interest on daily balances. The following explanation, therefore, may be of interest. With the Boston ledger, for example, the balances are carried forward from day to day, and show simply the amount to the credit of the depositor. It would be physically impossible to figure interest on the face of the Boston ledger. A slip which has a line for each day of the month is, therefore, headed for each account. After the bookkeeper has proved his ledger, he takes the interest slips and transcribes to them balances as they appear in the ledger. He records only thousands and hundreds. Any amount under $85 or $90 is omitted and amounts above this sum are figured as an even hundred dollars. This may seem like robbing the depositor of a part of the interest that is due him, but this is not the case, for the bank rarely makes deductions for all of the items to which it would be entitled, before figuring interest.

At the end of the month the balances so transcribed to the interest slips are added and one day's interest calculated on the total balance at the rate allowed. This is equivalent to figuring thirty days' or thirty-one days' interest on the average daily balance for the month. Special interest tables are used to show the amount of interest for one day at the various amounts and rates. A reproduction of the page of one of these books is shown in Figure 6.

In any seasonal business, it is possible that a concern's

THOUSANDS																					
1	.05	100	5.47,9	200	10.95,9	300	16.43,8	400	21.91,8	500	27.39,7	600	32.87,7	700	38.35,6	800	43.83,6	900	49.31,5
2	.11	101	5.53,4	201	11.01,4	301	16.49,3	401	21.97,3	501	27.45,2	601	32.93,2	701	38.41,1	801	43.89,0	901	49.37,0
3	.16	102	5.58,9	202	11.06,8	302	16.54,8	402	22.02,7	502	27.50,7	602	32.98,6	702	38.46,6	802	43.94,5	902	49.42,5
4	.22	103	5.64,4	203	11.12,3	303	16.60,3	403	22.08,2	503	27.56,2	603	33.04,1	703	38.52,1	803	44.00,0	903	49.47,9
5	.27	104	5.69,9	204	11.17,8	304	16.65,8	404	22.13,7	504	27.61,6	604	33.09,6	704	38.57,5	804	44.05,5	904	49.53,4
6	.33	105	5.75,3	205	11.23,3	305	16.71,2	405	22.19,2	505	27.67,1	605	33.15,1	705	38.63,0	805	44.11,0	905	49.58,9
7	.38	106	5.80,8	206	11.28,8	306	16.76,7	406	22.24,7	506	27.72,6	606	33.20,5	706	38.68,5	806	44.16,4	906	49.64,4
8	.44	107	5.86,3	207	11.34,2	307	16.82,2	407	22.30,1	507	27.78,1	607	33.26,0	707	38.74,0	807	44.21,9	907	49.69,9
9	.49	108	5.91,8	208	11.39,7	308	16.87,7	408	22.35,6	508	27.83,6	608	33.31,5	708	38.79,5	808	44.27,4	908	49.75,3
		109	5.97,3	209	11.45,2	309	16.93,2	409	22.41,1	509	27.89,0	609	33.37,0	709	38.84,9	809	44.32,9	909	49.80,8
10	.55	110	6.02,7	210	11.50,7	310	16.98,6	410	22.46,6	510	27.94,5	610	33.42,5	710	38.90,4	810	44.38,4	910	49.86,3
11	.60	111	6.08,2	211	11.56,2	311	17.04,1	411	22.52,1	511	28.00,0	611	33.47,9	711	38.95,9	811	44.43,8	911	49.91,8
12	.66	112	6.13,7	212	11.61,6	312	17.09,6	412	22.57,5	512	28.05,5	612	33.53,4	712	39.01,4	812	44.49,3	912	49.97,3
13	.71	113	6.19,2	213	11.67,1	313	17.15,1	413	22.63,0	513	28.11,0	613	33.58,9	713	39.06,8	813	44.54,8	913	50.02,7
14	.77	114	6.24,7	214	11.72,6	314	17.20,5	414	22.68,5	514	28.16,4	614	33.64,4	714	39.12,3	814	44.60,3	914	50.08,2
15	.82	115	6.30,1	215	11.78,1	315	17.26,0	415	22.74,0	515	28.21,9	615	33.69,9	715	39.17,8	815	44.65,8	915	50.13,7
16	.88	116	6.35,6	216	11.83,6	316	17.31,5	416	22.79,5	516	28.27,4	616	33.75,3	716	39.23,3	816	44.71,2	916	50.19,2
17	.93	117	6.41,1	217	11.89,0	317	17.37,0	417	22.84,9	517	28.32,9	617	33.80,8	717	39.28,8	817	44.76,7	917	50.24,7
18	.99	118	6.46,6	218	11.94,5	318	17.42,5	418	22.90,4	518	28.38,4	618	33.86,3	718	39.34,2	818	44.82,2	918	50.30,1
19	1.04	119	6.52,1	219	12.00,0	319	17.47,9	419	22.95,9	519	28.43,8	619	33.91,8	719	39.39,7	819	44.87,7	919	50.35,6
20	1.10	120	6.57,5	220	12.05,5	320	17.53,4	420	23.01,4	520	28.49,3	620	33.97,3	720	39.45,2	820	44.93,2	920	50.41,1
21	1.15	121	6.63,0	221	12.11,0	321	17.53,9	421	23.06,8	521	28.54,8	621	34.02,7	721	39.50,7	821	44.98,6	921	50.46,6
22	1.21	122	6.68,5	222	12.16,4	322	17.64,4	422	23.12,3	522	28.60,3	622	34.08,2	722	39.56,2	822	45.04,1	922	50.52,1
23	1.26	123	6.74,0	223	12.21,9	323	17.69,9	423	23.17,8	523	28.65,8	623	34.13,7	723	39.61,6	823	45.09,6	923	50.57,5
24	1.32	124	6.79,5	224	12.27,4	324	17.75,3	424	23.23,3	524	28.71,2	624	34.19,2	724	39.67,1	824	45.15,1	924	50.63,0
25	1.37	125	6.84,9	225	12.32,9	325	17.80,8	425	23.28,8	525	28.76,7	625	34.24,7	725	39.72,6	825	45.20,5	925	50.68,5
26	1.42	126	6.90,4	226	12.38,4	326	17.86,3	426	23.34,2	526	28.82,2	626	34.30,1	726	39.78,1	826	45.26,0	926	50.74,0
27	1.48	127	6.95,9	227	12.43,8	327	17.91,8	427	23.39,7	527	28.87,7	627	34.35,6	727	39.83,6	827	45.31,5	927	50.79,5
28	1.53	128	7.01,4	228	12.49,3	328	17.97,3	428	23.45,2	528	28.93,2	628	34.41,1	728	39.89,0	828	45.37,0	928	50.84,9
29	1.59	129	7.06,8	229	12.54,8	329	18.02,7	429	23.50,7	529	28.98,6	629	34.46,6	729	39.94,5	829	45.42,5	929	50.90,4
30	1.64	130	7.12,3	230	12.60,3	330	18.08,2	430	23.56,2	530	29.04,1	630	34.52,1	730	40.00,0	830	45.47,9	930	50.95,9
31	1.70	131	7.17,8	231	12.65,8	331	18.13,7	431	23.61,6	531	29.09,6	631	34.57,5	731	40.05,5	831	45.53,4	931	51.01,4
32	1.75	132	7.23,3	232	12.71,2	332	18.19,2	432	23.67,1	532	29.15,1	632	34.63,0	732	40.11,0	832	45.58,9	932	51.06,8
33	1.81	133	7.28,8	233	12.76,7	333	18.24,7	433	23.72,6	533	29.20,5	633	34.68,5	733	40.16,4	833	45.64,4	933	51.12,3
34	1.86	134	7.34,2	234	12.82,2	334	18.30,1	434	23.78,1	534	29.26,0	634	34.74,0	734	40.21,9	834	45.69,9	934	51.17,8
35	1.92	135	7.39,7	235	12.87,7	335	18.35,6	435	23.83,6	535	29.31,5	635	34.79,5	735	40.27,4	835	45.75,3	935	51.23,3
36	1.97	136	7.45,2	236	12.93,2	336	18.14,1	436	23.89,0	536	29.37,0	636	34.84,9	736	40.32,9	836	45.80,8	936	51.28,8
37	2.03	137	7.50,7	237	12.98,6	337	18.46,6	437	23.94,5	537	29.42,5	637	34.90,4	737	40.38,4	837	45.86,3	937	51.34,2
38	2.08	138	7.56,2	238	13.04,1	338	18.52,1	438	24.00,0	538	29.47,9	638	34.95,9	738	40.43,8	838	45.91,8	938	51.39,7
39	2.14	139	7.61,6	239	13.09,6	339	18.57,5	439	24.05,5	539	29.53,4	639	35.01,4	739	40.49,3	839	45.97,3	939	51.45,2
40	2.19	140	7.67,1	240	13.15,1	340	18.63,0	440	24.11,0	540	29.58,9	640	35.06,8	740	40.54,8	840	46.02,7	940	51.50,7
41	2.25	141	7.72,6	241	13.20,5	341	18.68,5	441	24.16,4	541	29.64,4	641	35.12,3	741	40.60,3	841	46.08,2	941	51.56,2
42	2.30	142	7.78,1	242	13.26,0	342	18.74,0	442	24.21,9	542	29.69,9	642	35.17,8	742	40.65,8	842	46.13,7	942	51.61,6
43	2.36	143	7.83,6	243	13.31,5	343	18.79,5	443	24.27,4	543	29.75,3	643	35.23,3	743	40.71,2	843	46.19,2	943	51.67,1
44	2.41	144	7.89,0	244	13.37,0	344	18.84,9	444	24.32,9	544	29.80,8	644	35.28,8	744	40.76,7	844	46.24,7	944	51.72,6
45	2.47	145	7.94,5	245	13.42,5	345	18.90,4	445	24.38,4	545	29.86,3	645	35.34,2	745	40.82,2	845	46.30,1	945	51.78,1
46	2.52	146	8.00,0	246	13.47,9	346	18.95,9	446	24.43,8	546	29.91,8	646	35.39,7	746	40.87,7	846	46.35,6	946	51.83,6
47	2.58	147	8.05,5	247	13.53,4	347	19.01,4	447	24.49,3	547	29.97,3	647	35.45,2	747	40.93,2	847	46.41,1	947	51.89,0
48	2.63	148	8.11,0	248	13.58,9	348	19.06,8	448	24.54,8	548	30.02,7	648	35.50,7	748	40.98,6	848	46.46,6	948	51.94,5
49	2.68	149	8.16,4	249	13.64,4	349	19.12,3	449	24.60,3	549	30.08,2	649	35.56,2	749	40.04,1	849	46.52,1	949	52.00,0

FIGURE 6 (PART 1).
INTEREST TABLE.

50	2.74	150	8.21,9	250	13.69,9	350	19.17,8	450	24.65,8	550	30.13,7	650	35.61,6	750	41.09,6	850	46.57,5	950	52.05,5
51	2.79	151	8.27,4	251	13.75,3	351	19.23,3	451	24.71,2	551	30.19,2	651	35.67,1	751	41.15,1	851	46.63,0	951	52.11,0
52	2.85	152	8.32,9	252	13.80,8	352	19.28,8	452	24.76,7	552	30.24,7	652	35.72,6	752	41.20,5	852	46.68,5	952	52.16,4
53	2.90	153	8.38,4	253	13.86,3	353	19.34,2	453	24.82,2	553	30.30,1	653	35.78,1	753	41.26,0	853	46.74,0	953	52.21,9
54	2.96	154	8.43,8	254	13.91,8	354	19.39,7	454	24.87,7	554	30.35,6	654	35.83,6	754	41.31,5	854	46.79,5	954	52.27,4
55	3.01	155	8.49,3	255	13.97,3	355	19.45,2	455	24.93,2	555	30.41,1	655	35.89,0	755	41.37,0	855	46.84,9	955	52.32,9
56	3.07	156	8.54,8	256	14.02,7	356	19.50,7	456	24.98,6	556	30.46,6	656	35.94,5	756	41.42,5	856	46.90,4	956	52.38,4
57	3.12	157	8.60,3	257	14.08,2	357	19.56,2	457	25.04,1	557	30.52,1	657	36.00,0	757	41.47,9	857	46.95,9	957	52.43,8
58	3.18	158	8.65,8	258	14.13,7	358	19.61,6	458	25.09,6	558	30.57,5	658	36.05,5	758	41.53,4	858	47.01,4	958	52.49,3
59	3.23	159	8.71,2	259	14.19,2	359	19.67,1	459	25.15,1	559	30.63,0	659	36.11,0	759	41.58,9	859	47.06,8	959	52.54,8
60	3.29	160	8.76,7	260	14.24,7	360	19.72,6	460	25.20,5	560	30.68,5	660	36.16,4	760	41.64,4	860	47.12,3	960	52.60,3
61	3.34	161	8.82,2	261	14.30,1	361	19.78,1	461	25.26,0	561	30.74,0	661	36.21,9	761	41.69,9	861	47.17,8	961	52.65,8
62	3.40	162	8.87,7	262	14.35,6	362	19.83,6	462	25.31,5	562	30.79,5	662	36.27,4	762	41.75,3	862	47.23,3	962	52.71,2
63	3.45	163	8.93,2	263	14.41,1	363	19.89,0	463	25.37,0	563	30.84,9	663	36.32,9	763	41.80,8	863	47.28,8	963	52.76,7
64	3.51	164	8.98,6	264	14.46,6	364	19.94,5	464	25.42,5	564	30.90,4	664	36.38,4	764	41.86,3	864	47.34,2	964	52.82,2
65	3.56	165	9.04,1	265	14.52,1	365	20.00,0	465	25.47,9	565	30.96,9	665	36.43,8	765	41.91,8	865	47.39,7	965	52.87,7
66	3.62	166	9.09,6	266	14.57,5	366	20.05,5	466	25.53,4	566	31.01,4	666	36.49,3	766	41.97,3	866	47.45,2	966	52.93,2
67	3.67	167	9.15,1	267	14.63,0	367	20.11,0	467	25.58,9	567	31.06,8	667	36.54,8	767	42.02,7	867	47.50,7	967	52.98,6
68	3.73	168	9.20,5	268	14.68,5	368	20.16,4	468	25.64,4	568	31.12,3	668	36.60,3	768	42.08,2	868	47.56,2	968	53.04,1
69	3.78	169	9.26,0	269	14.74,0	369	20.21,9	469	25.69,9	569	31.17,8	669	36.65,8	769	42.13,7	869	47.61,6	969	53.09,6
70	3.84	170	9.31,5	270	14.79,5	370	20.27,4	470	25.75,3	570	31.23,3	670	36.71,2	770	42.19,2	870	47.67,1	970	53.15,1
71	3.89	171	9.37,0	271	14.84,9	371	20.32,9	471	25.80,8	571	31.28,8	671	36.76,7	771	42.24,7	871	47.72,6	971	53.20,5
72	3.95	172	9.42,5	272	14.90,4	372	20.38,4	472	25.86,3	572	31.34,2	672	36.82,2	772	42.30,1	872	47.78,1	972	53.26,0
73	4.00	173	9.47,9	273	14.95,9	373	20.43,8	473	25.91,8	573	31.39,7	673	36.87,7	773	42.35,6	873	47.83,6	973	53.31,5
74	4.05	174	9.53,4	274	15.01,4	374	20.49,3	474	25.97,3	574	31.45,2	674	36.93,2	774	42.41,1	874	47.89,0	974	53.37,0
75	4.11	175	9.58,9	275	15.06,8	375	20.54,8	475	26.02,7	575	31.50,7	675	36.98,6	775	42.46,6	875	47.94,5	975	53.42,5
76	4.16	176	9.64,4	276	15.12,3	376	20.60,3	476	26.08,2	576	31.56,2	676	37.04,1	776	42.52,1	876	48.00,0	976	53.47,9
77	4.22	177	9.69,9	277	15.17,8	377	20.65,8	477	26.13,7	577	31.61,6	677	37.09,6	777	42.57,5	877	48.05,5	977	53.53,4
78	4.27	178	9.75,3	278	15.23,3	378	20.71,2	478	26.19,2	578	31.67,1	678	37.15,1	778	42.63,0	878	48.11,0	978	53.58,9
79	4.33	179	9.80,8	279	15.28,8	379	20.76,7	479	26.24,7	579	31.72,6	679	37.20,5	779	42.68,5	879	48.16,4	979	53.64,4
80	4.38	180	9.86,3	280	15.34,2	380	20.82,2	480	26.30,1	580	31.78,1	680	37.26,0	780	42.74,0	880	48.21,9	980	53.69,9
81	4.44	181	9.91,8	281	15.39,7	381	20.87,7	481	26.35,6	581	31.83,6	681	37.31,5	781	42.79,5	881	48.27,4	981	53.75,3
82	4.49	182	9.97,3	282	15.45,2	382	20.93,2	482	26.41,1	582	31.89,0	682	37.37,0	782	42.84,9	882	48.32,9	982	53.80,8
83	4.55	183	10.02,7	283	15.50,7	383	20.98,6	483	26.46,6	583	31.94,5	683	37.42,5	783	42.90,4	883	48.38,4	983	53.86,3
84	4.60	184	10.08,2	284	15.56,2	384	21.04,1	484	26.52,1	584	32.00,0	684	37.47,9	784	42.95,9	884	48.43,8	984	53.91,8
85	4.66	185	10.13,7	285	15.61,6	385	21.09,6	485	26.57,5	585	32.05,5	685	37.53,4	785	43.01,4	885	48.49,3	985	53.97,3
86	4.71	186	10.19,2	286	15.67,1	386	21.15,1	486	26.63,0	586	32.11,0	686	37.58,9	786	43.06,8	886	48.54,8	986	54.02,7
87	4.77	187	10.24,7	287	15.72,6	387	21.20,5	487	26.68,5	587	32.16,4	687	37.64,4	787	43.12,3	887	48.60,3	987	54.08,2
88	4.82	188	10.30,1	288	15.78,1	388	21.26,0	488	26.74,0	588	32.21,9	688	37.69,9	788	43.17,8	888	48.65,8	988	54.13,7
89	4.88	189	10.35,6	289	15.83,6	389	21.31,5	489	26.79,5	589	32.27,4	689	37.75,3	789	43.23,3	889	48.71,2	989	54.19,2
90	4.93	190	10.41,1	290	15.89,0	390	21.37,0	490	26.84,9	590	32.32,9	690	37.80,8	790	43.28,8	890	48.76,7	990	54.24,7
91	4.99	191	10.46,6	291	15.94,5	391	21.42,5	491	26.90,4	591	32.38,4	691	37.86,3	791	43.34,2	891	48.82,2	991	54.30,1
92	5.04	192	10.52,1	292	16.00,0	392	21.47,9	492	26.95,9	592	32.43,8	692	37.91,8	792	43.39,7	892	48.87,7	992	54.35,6
93	5.10	193	10.57,5	293	16.05,5	393	21.53,4	493	27.01,4	593	32.49,3	693	37.97,3	793	43.45,2	893	48.93,2	993	54.41,1
94	5.15	194	10.63,0	294	16.11,0	394	21.58,9	494	27.06,8	594	32.54,8	694	38.02,7	794	43.50,7	894	48.98,6	994	54.46,6
95	5.21	195	10.68,5	295	16.16,4	395	21.64,4	495	27.12,3	595	32.60,3	695	38.08,2	795	43.56,2	895	49.04,1	995	54.52,1
96	5.26	196	10.74,0	296	16.21,9	396	21.69,9	496	27.17,8	596	32.65,8	696	38.13,7	796	43.61,6	896	49.09,6	996	54.57,5
97	5.32	197	10.79,5	297	16.27,4	397	21.75,3	497	27.23,3	597	32.71,2	697	38.19,2	797	43.67,1	897	49.15,1	997	54.63,0
98	5.37	198	10.84,9	298	16.32,9	398	21.80,8	498	27.28,8	598	32.76,7	698	38.24,7	798	43.72,6	898	49.20,5	998	54.68,5
99	5.42	199	10.90,4	299	16.38,4	399	21.86,3	499	27.34,2	599	32.82,2	699	38.30,1	799	43.78,1	899	49.26,0	999	54.74,0
Millions		10	547.94,5	20	1095.89,0	30	1643.83,6	40	2191.78,1	50	2739.72,6	60	3287.67,1	70	3835.61,6	80	4383.56,2	90	4931.50,7

Interest computed for One Day on the basis of 365 days to the year.

FIGURE 6 (PART 2).

INTEREST TABLE.

bank account may grow abnormally large at one season of the year. If the concern is drawing little or no interest on its balances, it does not seem to be good business to let the money lie idle for a number of months. Under these circumstances, the business man might arrange to have the excess balance transferred to a certificate of deposit, provided the account is large enough to warrant transferring not less than $5,000, even in a bank of moderate size. The business man may arrange that the money shall be left for a definite length of time. The banker is able to invest time money of this class to better advantage than deposits payable on demand, and he will, in consequence, allow a higher rate of interest. A demand of this kind for increased interest should not be made unless it is contemplated that the money will remain with the bank for four, five or six months.

51. *Certificates of deposit.*—Certificates of deposit are really only negotiable receipts of money deposited. They are issued payable to the order of the depositor or someone designated by him. They are payable on demand, on a given number of days' demand, or on time. The national banks of the country are required to carry only five per cent reserve against time deposits. Some states require no reserve whatever against time deposits, provided the deposit is represented by a certificate in which the due date of the deposit is stated, and provided also that the maturity of the deposit is not within a period of thirty days.

Certificates of deposit are a specialized form of deposit and are not subject to check. If it is desired to use a part of the money represented by a demand certificate of deposit, the best practice requires that the certificate of deposit be turned in and a new one for a lower amount issued. The bank pays the depositor the difference in

cash, checks, or credit to his drawing account. If interest has been allowed, it should be adjusted at the time of the change. Some banks make partial payments against certificates of deposit, reducing the value of the certificate on their books by the amount of the payment made to the depositor. This practice cannot be commended.

The bank has two records of certificates of deposit outstanding. One is the stub in the book from which the certificates are removed, and the other is a certificate of deposit register. The certificate of deposit register is really a subsidiary ledger of practically the same class as the individual ledger with the exception that the accounts show practically no action. The size and form of this register varies in different banks. The most acceptable forms are loose-leaf, showing the number of the certificate, the name of the depositor, the name of the payee, the date when the certificate was issued, the date when due, and the rate of interest. If a certificate is left on demand and kept for a number of interest periods, the interest paid or credited is noted on the certificate of deposit register.

CHAPTER VI

PAYING CHECKS

52. *Paying checks.*—Although a business man's motive in opening a bank account may be to provide a safe place for the deposit of his collections, he is equally interested in making payments from the money so deposited, and in getting a proper voucher for each disbursement.

Checks are paid in many ways and each method presents different features. The simplest and most readily understood method of paying a check is by cash at the teller's window. Even here, there are at least three classes of persons who may present a depositor's check; first, the depositor himself; second, some one known to the teller; and third, some one unknown to the teller.

When a depositor himself presents his check at the window, and requests cash, there are no complications of any kind, except that the teller must know or find out, before cashing the check, that the account is in funds for the amount requested. The check may be drawn to the order of "cash," in which case it is not necessary to indorse it, although some banks make it a rule to require their tellers to have all checks indorsed, even though the depositor draws them to cash or bearer. From the bank's standpoint, of course, it is desirable to have the indorsement of the person receiving the money on the back of each check and if payment is made to any but the depositor himself, when the check is drawn

to cash, the bank should require the indorsement of the person to whom the money is paid, even though legally it may not be authorized to make this demand. The only protection the bank can have in case the person at the window should refuse to indorse a check payable to cash, would be to make a memorandum to the effect that the money was paid to such and such a man. No business man will refuse to indorse a check drawn to cash, unless perhaps it is his own.

When a depositor's check is presented to the teller by some one other than the depositor, but known to the teller, the procedure is just the same. The teller must know that the account is in funds, that the signature is genuine, that stop payment instructions have not been recorded against the check, and that the person claiming to be the payee of the check is the person mentioned therein.

When a depositor's check is presented to the teller by some one unknown to him, he cannot make the payment because the instructions to the bank, as set forth in the check, are to pay a certain person. The bank must satisfy itself that the person presenting the check is the person to whom it is payable, and it will be held liable if payment is made to the wrong person. Obliging tellers try to establish the identity of the person at the window, if possible, although they are not required to do so. There are many ways to do this, but it is well for the teller to use careful discrimination in making payments to strangers. Personal introductions are the only safe ones for a teller to follow, and depositors should be reasonable with their bank in attempting to adjust complaints made by persons in whose favor checks have been issued. It frequently happens that the drawees are grossly ignorant of the meaning of iden-

tification and consequently cause the teller much trouble.

The following example will serve to illustrate the weakness of a method commonly employed to establish one's identity. The weakness is evident to the bank teller whose attitude frequently appears unreasonable to the man at the window.. The latter produces a number of letters addressed in the name of the person to whom a check is drawn. These letters have apparently passed through the post office, the stamps are cancelled, the addresses are in different handwritings, etc., yet the teller is not convinced. Why? A frequent method of obtaining money through forged checks is accomplished by robbing a mail box. The robber finds letters containing checks. These checks are drawn on different banks and he, in some way or other, obtains or duplicates the body of the check itself and forges the name of the maker of the check. If he is skillful enough to forge the name of a depositor, he finds no trouble in addressing letters to himself from this depositor and in cancelling the stamp, etc. He appears before the teller's window, presents the check and demands the money. He produces papers and documents from his pocket, including letters addressed to himself, membership cards in lodges, etc., and expects to receive the money. The careful teller refuses payment. Other equally plausible cases could be cited, but it is sufficient to say that the bank teller is aiming to protect both the bank and the depositor by his caution.

53. *Through the clearing house.*—When a check is presented to the paying bank through the clearing house, it is paid just as effectively as if it had been presented at the paying teller's window and actual cash handed to the man who presented it. As will be described later,

actual cash is paid into the clearing house if the balance of the day's clearings is against the bank. The same process must be gone through in examining the checks as is followed in case a check is presented at the paying teller's window. The bookkeeper must decide whether the account has a sufficient amount of good funds on deposit to pay the check, and must see that there is no order to refuse payment of the particular check before him. The paying teller must examine the signature and determine whether it is genuine. Others must see that the check is correctly indorsed, that the date is correct, and that the figures and the written amount in the body of the check are in harmony. If any one of these features is incorrect, or if for any other reason it should not be paid, the check is returned to the bank which sent it to the paying bank through the clearing house and the money received for it.

54. *Certified checks.*—When a check is certified, it is as effectively paid, so far as the depositor is concerned, as if it had been paid in cash. A certified check may be defined as the check of a depositor, drawn to the order of some person, upon the face of which the bank has certified as to its genuineness, after having charged it to the account of the depositor. Since the check is paid, so far as the depositor is concerned, it is necessary for the teller to make the same rigid investigation of the check as when he pays cash or pays through the clearing house.

As noted in the foregoing, when a check is certified, it is charged to the account of the depositor. It is credited to an account known as "Certified checks" and remains in this account as a direct liability of the bank until it is actually paid. The bank's liability is not greater after certification than it was before, but it is slightly

changed. Before certification the bank owed the money to the depositor. After certification it owes the money to the payee named in the check, or to his order.

An important point of liability incurred in certification is worthy of note. If the maker of a check procures its certification before delivery to the payee, he can be held liable for the amount, in case the bank fails before the check is actually paid. If the payee secures certification, he has no claim against the maker of the check, because, in procuring its certification, he elects to accept the responsibility of the bank instead of that of the maker.

55. *Certified check register.*—The nature of a bank's business determines the form of the certification. Banks in lower Manhattan certify a great many checks and consequently require records that are capable of rapid work. In the average bank the certification record must show the date of certification, the name of the maker of the check, the payee and the amount. A column is left for making note of the date when the checks are actually paid.

As the checks are paid, whether through the clearing house, or over the receiving teller's window, being included in a deposit made, they are checked against the certification register. When the checks are issued, they are credited to "Certified checks," and when paid, they are debited to this account. The account "Certified checks" on the general ledger thus represents the certified checks that have not been presented to the bank for payment. If the checks are marked off in the certified check register as they are paid, a summary of the items that have not been thus marked off must agree with the balance to the credit of "Certified checks" in the general ledger. Therefore, to prove the certified check

register is to make this summary of the amounts of the checks outstanding, which must agree with the general ledger.

56. *Certified checks not used.*—In the light of the foregoing remarks, especially those which refer to the charging of the amount to the depositor at the time the check is certified, it is evident that the depositor should endeavor to see that checks certified against his account are presented for payment promptly, because so far as his account is concerned, the amount has been paid. Certified checks should never be destroyed under any circumstances. If they are returned to the depositor or are not required, they should be indorsed in the same manner as checks received from customers or otherwise and deposited. The bank will then charge "Certified checks" with the amount and credit the depositor as a part of the deposit.

57. *Lost certified checks.*—If a certified check is accidentally destroyed or lost beyond recovery, the depositor may recover the amount, and make payment to his creditor, by filing a bond of indemnity with the bank. The bank will usually require that the bond be drawn for double the amount of the certified check. The bond of indemnity is required in order to protect the bank against adverse claims that may be set up against it by some holder for value.[1] The character of this bond will depend very largely upon the standing of the depositor in the community. Usually, the signature of one or two responsible persons to the bond is all that is required.

58. *Overdrafts.*—The definition of "overdraw" is "to draw against an account with a bank or a person for a larger sum than stands to the credit of the drawer." An

[1] See Volume XII, "Commercial Law."

overdraft, therefore, is the amount due to the bank after one or more checks have been charged, the total of which is in excess of the balance standing to the credit of the depositor, before the checks were charged. To overdraw one's account, whether by mistake or with full knowledge of its condition, is to make a bad record against one's account on the individual ledger that can never be erased.

It is the general practice for an officer to see a list of the overdrafts each day. A list is frequently made on the daily statement and is given as careful inspection as the statement itself. In other instances, a special daily record is kept of overdrafts.

Overdrafts are always noted by the bank examiner, and usually he carries a list away with him as a part of his records. If a borrower should be overdrawn at the time of his visit, therefore, the loans are scrutinized with special care.

The individual ledgers are credit ledgers; consequently an overdraft is not an easy thing to carry. It is the general custom to deduct the total of the overdrafts from the total of the credit balances and carry the net amount as individual deposits.

When reports are made to the Comptroller of the Currency, or to the state superintendents of banks, the reports must show overdrafts and individual deposits in full. The figures shown on the bank's books are then adjusted by adding the amount of the overdrafts shown on the books to the net deposits and showing them on the debit side of the statement as an asset similar to a loan.

An overdraft is really an enforced loan, and as such is an exceedingly unsatisfactory form of investment. If a business man wishes to hold the good will of his banker,

he will not resort to this method of raising money to carry on his business.

59. *Signature files.*—Responsibilities in connection with the care of signature cards are usually concentrated in the paying teller's department. In some of the very large banks, having a number of paying tellers, the responsibilities are given to a special department. The person in charge of the cards sees that they are conveniently arranged and indexed for ready reference and that they are revised from time to time as occasion requires.

No one is permitted to take the cards from the case without proper authority and notation. Access to the files is denied to all clerks except those who use them in their daily work. As a rule, an officer would not go to the signature files himself, but would send for a card, if he needed it for any special purpose.

A file containing powers of attorney given by depositors in favor of others, letters testamentary and administration, certified copies of by-laws, resolutions of boards of directors of corporations, and all other collateral papers are kept in conjunction with the signature cards. The person in charge of the files sees that these documents are revised from time to time, as may be necessary.

60. *Pay-rolls.*—Banks are always glad to help their depositors in connection with the preparation of pay-rolls. It is no easy task to be prepared at all times to meet any demands that may be made for the various kinds of currency and silver that is needed to make up pay-rolls. Some banks find it difficult to secure small bills and are compelled to pay express charges from their New York or other important correspondents to secure them. The depositor who makes demands for

large quantities of small bills and silver should remember this and be generous if it should happen that it is impossible for the bank to fill an unusual demand.

The preparation of a large pay-roll with odd amounts of each denomination of gold and silver requires much time. The depositor should never present a check for a large pay-roll during a busy time of day, or just before the closing hour on Saturday. The teller is usually trying to deliver the money as quickly as possible, and since the paying of money is a trying one in any event, he should not be worried needlessly by the thoughtless cashier who might secure his money just as well at some other time of the day.

Most concerns having large pay-rolls realize the advantage of making arrangements to have them prepared beforehand. The pay-roll clerk instructs the cashier just how much money he needs, and the denominations, so that while the cashier is drawing a check and arranging to have it signed, he telephones the bank and makes known just what he requires. When he gets the check signed and goes to the bank, he finds his money ready and waiting for him, and the whole transaction takes no more time than the cashing of a ten-dollar check. The teller is able to make up the pay-roll at his leisure and the danger of error is thus minimized.

61. *The reserve.*—The reserve is that part of a bank's assets which is kept in cash, or on deposit with its federal reserve bank or other reserve agent approved by the proper authorities, as a reasonable provision for meeting demands that may be made upon it. Reserves should be fixed by the bank itself as a result of experience. If we had a great central bank, instead of the system of small banks, in this country, there would be no need for legislation to determine just what pro-

RESERVE REQUIREMENTS FOR MEMBER BANKS

(1) Central Reserve City Banks.

Cash in bank's own vaults	6%
In Federal reserve bank (compulsory)	7%
In own vaults or in Federal reserve bank	5%
Total required reserve	18%

(2) Reserve City Banks.

	12 mos.	18 mos.	24 mos.	30 mos.	36 mos.	Thereafter
Cash in bank's own vaults	6%	6%	6%	6%	6%	5%
In Federal reserve bank (compulsory)	3%	4%	5%	6%	6%	6%
In own vaults or with Federal reserve bank or with approved reserve agents (as defined in National Banking Act)	6%	5%	4%	3%	3%	.....
In own vaults or in Federal reserve bank	....	....	....	....	....	4%
Total required reserve	15%	15%	15%	15%	15%	15%

(3) Country Banks.

Cash in bank's own vaults	5%	5%	5%	5%	5%	4%
In Federal reserve bank (compulsory)	2%	3%	4%	5%	5%	5%
In own vaults or with Federal reserve bank or with approved reserve agents (as defined by National Banking Act)	5%	4%	3%	2%	2%	.....
In own vaults or in Federal reserve bank	....	....	....	....	....	3%
Total required reserve	12%	12%	12%	12%	12%	12%

FIGURE 7.

RESERVES REQUIRED.

portion of deposit liability should be carried as reserve. The great central banks of the world testify to the truth of this statement. The Bank of France carries 75 per cent, the Bank of England from 45 to 50 per cent, the Imperial Bank of Germany about 40 per cent.

The federal reserve banks, authorized by the Federal Reserve Act of 1913, carry a cash reserve of 33⅓ per cent of their deposits in gold or lawful money, and 35 per cent reserve in gold for all notes issued.

This act also provides new reserves for the national banks which become members of the federal reserve system, as indicated in the chart shown in Figure 7. The reserves of the state banks vary so much that it would be useless to state them here.

CHAPTER VII

BANK LOANS

62. *Discounts.*—A discounted bill receivable is the purest form of commercial loan we have in this country. It originates in the following manner: A merchant, A, buys goods from B, a manufacturer, and gives him a note payable thirty, sixty, ninety or even one hundred twenty days after date, in payment therefor. B is glad to get this obligation because he can present it to his bank and receive immediate credit for the face of the note, less discount to maturity. This method of settling accounts between merchant and manufacturer is not used so much to-day as it has been in the past. Merchants have begun to realize that by showing a good statement to the bank, they can borrow money with which to pay the manufacturer, in cash. By so doing, they are able to secure better discounts than by giving notes or accepting book credit. The notes thus given to the bank, signed only by the merchants, constitute the so-called "single name" paper. While it is perfectly good for the bank which knows all about the borrower, it does not have the transferring value of a note passing from A to B, representing an actual sale of goods.

63. *Timing a note.*—The note is first timed, that is, the maturity and the actual number of days falling between the date of discount and the date when due and payable is determined. Assume, for example, that it is a three months' note, dated March 27th. Looking at the calendar, we find that the 27th day of June falls on

Saturday. Notes falling due on Saturday need not be paid, at least in the State of New York, until the following Monday, so we must fix the due date of this note as June 29th. Thus the note has 94 days to run, since there are four days left in March, 30 in April, 31 in May and 29 days in June, instead of 90 days as would ordinarily be expected.

Banks are continually adopting modern appliances for the saving of labor and thought. One of the most wonderful instruments in use to-day is a machine that will time a note, indicate the bank holidays, compel the attention of the clerk to the correct date when the note is due and payable, and figure the interest, at one operation. Practically no thought is necessary in using this machine. It is set for the current day each morning, and even this is a simple process.

64. *Calculation of interest.*—The New York Stock Exchange has established certain fixed rules regarding the calculation of interest, and all banks in the vicinity follow the same method. Business men frequently wonder why a note, for example, for $1,000, dated July 1, payable four months later, with interest at the rate of 6 per cent, should earn more than $20 interest, whereas, if they are paying interest on a mortgage, they pay but $20. A bank is lending money from day to day and frequently is able to make a loan for a few days. It, therefore, is just and proper that loans on which interest is paid, not by the year, but according to the length of time the loan is to run, should be figured on the basis of the number of days between the time the loan is made and the time it is paid.

It is the custom to figure interest on bonds and mortgages by months or by months and days, if there is occasion to break the interest in that way. This, also, is

proper because the interest on this class of loan is paid, as a rule, twice a year, at the fixed rate. Thus, if a mortgage carries 6 per cent interest, the amount which will be due at the end of the six months' period is $30 for each $1,000 of the obligation. If title is passed at the end of four months, four-sixths of the $30 belongs to the vendor, and two-sixths to the vendee. If the transfer is made at the end of the twelfth day of the fifth month, the vendor's proportion of the interest is the interest earned in four months and twelve days, or $22. This rule applies also to interest on bonds.

65. *Journal entries.*—A memorandum of the maturity date is made on the note itself, and the discount is figured at the proper rate for 94 days. Suppose the note is $1,560 and that the rate is 6 per cent. The discount on the note is then figured and deducted from the note, and the following entry put through the books:

	Dr.	Cr.
Bills Discounted	$1,560.00	
To Individual deposits		$1,536.08
" Discount		23.92

That is, the asset account, bills discounted, is increased $1,560, the depositor is given credit for $1,536.08, and the earning account, discount earned, is credited with $23.92.

It must not be inferred that in every bank the entry passes through in exactly this form, but the principles are the same, no matter what form of records are established. The note remains in the bank's assets, Bills Discounted," until it is paid, or charged off the books, should the bank be so unfortunate as to lose it.

It is the custom to credit the depositor's account by

entries made on small tickets the same size as a check. These tickets bear the date, the word "Credit" in large letters, and have spaces for the description of the credit and amount of the entry and a line for the signature of an officer. The total of discount received is credited to the account on the general ledger by a similar credit ticket and the total of the notes discounted during the day is debited to bills discounted on another ticket, bearing the word "Debit."

66. *Discount register.*—A thorough understanding of the mechanical process of handling loans is of unquestioned value to the business man, because it enables him to talk intelligently to his banker when applying for a loan. Notes are entered in the discount register, a book commonly used, in the order of their acceptance by the bank, and given a number. It is possible to identify a note by its number, so complete is the record. The book is ruled, usually, with the following columns running across the page: Date of discount, numbers (arranged consecutively), drawer, indorser, discounter, date of note, time (the time the note has to run), when due, amount, discount, proceeds, where payable and disposition.

67. *The tickler.*—After having been timed and entered in the discount register, the notes are immediately entered in the discount tickler. The discount tickler is a diary in which is kept a chronological memorandum of the notes and other items falling due. The discount tickler is usually ruled in order to make it possible to classify the information needed. The number of the discount is always shown, and usually the name of the drawer, the last indorser, the place where the note is payable and the amount are recorded. A column is provided for such memoranda as may be necessary. The

notes are entered in the tickler by one clerk, and checked by another, in order to prevent errors in entering.

The memorandum in the tickler of the notes discounted is made for the purpose of calling the notes to the attention of the discount clerk on the day they are due. All notes must be presented when due, at the place where they are payable, because, if this is not done, all indorsers are released from liability. This is both legal and reasonable. If a man whose name appears on the back of a note thinks that he may be called upon to pay it at maturity, he makes provision by building up his bank account. He knows when the note is due, and if he is not called upon to pay it at maturity, has every reason to believe that the maker has paid it. If the holder should appear a week or two later and say that the maker had not paid the note at maturity and that he was going to hold the indorser responsible, no business man would know exactly how to finance his business. The note must be presented at the place where it is payable, on the day when it is due, whether that place be around the corner, or at the farthest end of the country. If the bank fails to make the presentation, it may lose the entire amount of the note.

68. *Liability ledger.*—A bank doing an active business of this kind may find that it is discounting notes for several borrowers in which there is a duplication of names. A, B and C may be transacting business with each other and may all be depositors and borrowers of the same bank. If A gives B and C notes for goods bought from them, and if B gives A and C notes for goods bought from them, it is possible that the banker may find paper in his portfolio signed or indorsed by A, B and C in excess of the amounts allowed them as a line of credit, unless he watches the accounts closely.

In order that the amount allowed any one individual may not exceed the amount agreed upon or considered as the safe maximum, it is customary to keep a liability ledger in which is recorded in detail the amounts loaned to each borrower. This record is often called a credit ledger or bill book. It is, perhaps, known as well by the name bill book, as any other. There is more variation in the form of this book than in the discount register or the discount tickler, but all give the same result, namely: the amount of loans granted to each borrower, A, B and C, etc. The account of A, for example, shows the amount of loans on which A appears as maker, the amount of loans on which A appears as discounter, and the amount of loans made to others on which A appears as maker or indorser. It shows, also, if the loans are secured.

69. *Collection of local notes.*—If the note is payable at the bank at which it is discounted, it is charged to the account of the maker immediately after the opening of business on the day it is due. If the amount to the credit of the account is not sufficient to pay the note, the maker is requested to make a deposit or adjust the loan immediately. If the note is payable at the bank where it is discounted, but the maker has no account, it is charged to the note teller, or held by the discount clerk and taken up by the maker when he calls.

It is considered better accounting to charge the notes to the note teller. He receives the cash and credits himself for the amount received. If the note is payable at another bank in the same city or at a private address, it is charged to the note teller and presented by one of the messengers under his control. If payable at a bank, it is usually presented by the messenger and certified.

It is then added to the items to be sent through the clearing house on the following day.

70. *Collection of out-of-town notes.*—If the note is payable out of town, it is turned over to the collection clerk in time to give him an opportunity to send it to the bank that will present it when due. Notes discounted, payable out of town, are usually ear-marked or entered in the tickler a number of days previous to the date on which they are due, so that the clerk may not miss them when he takes out the notes for the day. When the returns are in the collection clerk's hands, he credits the discount clerk or bills discounted, and charges cash or the account of the bank which made the collection.

71. *Protest.*—If the note is refused for any reason, it is protested for non-payment. To protest is "to make, or procure to be made, a formal notarial certification attesting the dishonor of a bill of exchange or promissory note, together with due service of notice of dishonor."

Legally, a protest is "a solemn declaration in writing, in due form, made by a notary public, usually under his notarial seal, on behalf of the holder of the bill or note, protesting against all parties liable for any loss or damage by the non-acceptance or non-payment of the bill, or by the non-payment of a note, as the case may be." [1]

It is not necessary to protest the note, provided one can show that it was properly presented at the time it was due and at the proper place. The notary, being a state officer, is charged with the responsibility of performing the act in due form and his certificate is accepted by the courts as *prima facie* evidence of proper presentation. Of course this presentation may be offset by proper evidence to the contrary, but this is rather hard

[1] Webster's Dictionary, 1914 Ed.

to accomplish if the notary keeps proper records of his acts as required by law.

If for any reason a depositor does not wish to have an item protested he should notify the bank when depositing the item. Banks usually have "no protest" slips for pasting or pinning to items when desired.

72. *Presentation.*—A note payable on demand must be presented within a reasonable time in order to hold the indorser. In some states, demand notes must be presented within a specified number of days after date in order to hold the indorsers.

It is not customary for banks to accept notes for discount unless they are payable at a bank or trust company, because the laws regarding presentation of negotiable instruments at one's place of business or private residence vary. The holder of an instrument payable at a bank or trust company is required to present the document during the hours that a bank is required to be open for business.

73. *Accommodation loans.*—"He that is surety for a stranger shall smart for it; and he that hateth suretyship is sure."

It would be well for a business man to bear in mind this proverb when trying to decide whether or not he should lend his name to help a friend. In the eyes of a banker, accommodation indorsement is rather poor security. Let us examine a situation in which a request for accommodation indorsement might arise, and see how the entire transaction appears to the banker.

A business man, A, a dealer in hardware, has used up all his credit in the trade; that is, he has bought all the goods he can buy from the house from which he usually makes his purchases. His account at the wholesaler's is due but he has an unusual demand for new stock. He is,

therefore, compelled to pay cash. He has no borrowing account at the bank, since he has always preferred to hold off his creditors as long as possible rather than borrow. He must have the money, however, and so goes to one of his neighbors in good standing at the bank, whose credit is never used up, and asks him to assist in raising the needed money by indorsing his name to a note. The neighbor does not like to make himself liable in this way and tries to decline. The hardware man feels that the unwillingness to indorse his note is a criticism of his standing in the community, and ill feelings are the result, even before the note goes to the bank.

At last the hardware man persuades his neighbor to give the required indorsement and goes to the bank with the coveted piece of paper. Although the banker knows the maker's condition and that there is a possibility that he may not be able to pay the note at maturity, he does not wish to offend the indorser. After due hesitation he makes the loan to the hardware man but notifies the neighbor that he is held responsible for the note.

It may be stated as a general rule that accommodation paper of any class is not a desirable bank asset. The bank depositor who values his credit standing will remember the proverb quoted.

74. *Purchased paper.*—Purchased paper, or commercial paper, is a term given to notes of commercial houses, bought from a third party. This form of borrowing has become very popular in the United States. Let us review the different kinds of paper representing commercial transactions that we may have a clear understanding of this subject.

The whole system of credit is nothing more nor less than deferred payments. The housewife buys groceries during the week and pays for them on Saturday night;

the merchant orders his summer stock of clothing from the manufacturer during the winter months and promises to pay for it in four months' time; the federal government wishes to cut a channel through the Isthmus of Panama and issues bonds by the hundreds of millions of dollars; these are all credit transactions.

Previous to the year 1873, when Mr. Buell, the late President of the Importers and Traders National Bank, began a system of loaning directly to merchants on their own notes, it was the custom for those buying from the manufacturers to give their notes payable at sixty, ninety or one hundred and twenty days in settlement of the amount of goods purchased. These notes were taken to the banks by the manufacturers and discounted for their credit. When the merchant sold the goods he paid his notes; the bank was satisfied and was glad to take more of such notes when they were presented at another season. Thus grew up a very prominent part of our credit system until Mr. Buell introduced a new method. He discussed with his depositors their financial relations with their creditors, and soon demonstrated to them the possibility of getting 20, 10, 5 or 2 per cent 10 days, or some equally good discount, provided they were able to say to the manufacturers, "We shall pay you cash for the goods we expect to purchase. What can you do for us in the way of discounts?" The proposition the banker made to the merchants was: "Show me a clear statement of your assets and liabilities and a comparative statement of your profit and loss for a number of years, and tell me all about your business. If I find you are worthy of credit, I will lend you the money on your own note."

The system thus started has grown rapidly. Brokers began to make a business of seeking such paper, analyz-

ing the conditions of the companies who wished to borrow, and selling the paper to the banks and trust companies which had money to invest in this class of loan. Brokers arranged to sell the paper on commission and shopped around among the banks, delivering the paper after it was sold.

Many private bankers saw the profit in this business and began to buy the paper themselves and to sell it for their own account to the banks and trust companies who wished to buy.

The difference between the two businesses is that the banker actually buys the paper from the concern issuing it, while the broker merely acts as a broker, selling the paper before it is actually created. The banker is in a different position from the broker, so far as the purchaser of the paper is concerned. The fact that he is willing to buy the entire output of the paper of the house and to hold it, if necessary, until maturity, is an indication of the banker's estimate of the value of the paper.

The broker, on the other hand, is anxious to procure a commission, and inasmuch as there is none of his money at stake, he might urge the sale of one class of paper more strongly than another, because it pays him a higher commission, though in actual security it might be inferior. Purchased paper is used largely in trust companies as a short time investment for deposits. It is advisable for them to carry a certain amount of this paper, because there is no obligation to renew it at maturity. It is just so much money that can be counted on, except in the most trying times, and even during the panic of 1907, paper of this kind was paid promptly, while other notes were renewed. The bank always demands a bill of sale for every piece of paper purchased.

The paper is not indorsed to the bank by the banker or broker making the sale.

75. *Re-discounting at the federal reserve banks.*— The Federal Reserve Act, giving the member banks the privilege of re-discounting their paper, released this country from the evils of the bond-secured note circulation under which it had labored since the Civil War. This directly affects the interests of the man who is buying and selling, the man who is manufacturing raw materials into finished products. The act says:

Upon the indorsement of any of its member banks, with a waiver of demand, notice and protest by such bank, any Federal reserve bank may discount notes, drafts, and bills of exchange arising out of actual commercial transactions; that is, notes, drafts, and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes, or the proceeds of which have been used, or are to be used, for such purposes—the Federal Reserve Board to have the right to determine or define the character of the paper thus eligible for discount, within the meaning of this Act. Nothing in this Act contained shall be construed to prohibit such notes, drafts and bills of exchange, secured by staple agricultural products, or other goods, wares, or merchandise from being eligible for such discount; but such definition shall not include notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds or other investment securities, except bonds and notes of the Government of the United States. Notes, drafts and bills admitted to discount under the terms of this paragraph must have a maturity at the time of discount of not more than ninety days: *Provided*, That notes, drafts and bills drawn or issued for agricultural purposes or based on live stock and having a maturity not exceeding six months may be discounted in an amount to be limited to a percentage of the capital of the Federal reserve bank, to be ascertained and fixed by the Federal Reserve Board.

Any Federal reserve bank may discount acceptances which are based on the importation or exportation of goods and which have a maturity at time of discount of not more than three months, and indorsed by at least one member bank. The amount of acceptances so discounted shall at no time exceed one-half the paid-up capital stock and surplus of the bank for which the rediscounts are made.

The aggregate of such notes and bills bearing the signature or indorsement of any one person, company, firm or corporation rediscounted for any one bank shall at no time exceed ten per centum of the unimpaired capital and surplus of said bank; but this restriction shall not apply to the discount of bills of exchange drawn in good faith against actually existing values.

Any member bank may accept drafts or bills of exchange drawn upon it and growing out of transactions involving the importation or exportation of goods having not more than six months' sight to run; but no bank shall accept such bills to an amount equal at any time in the aggregate to more than one-half its paid-up capital stock and surplus.

CHAPTER VIII

SECURED LOANS

76. *Secured loans.*—A security, taken as collateral for a loan, should prove to be a valuable asset for the bank in case it becomes necessary to take it in satisfaction of the debt. Sometimes securities turn out to be liabilities rather than assets. Briefly stated, a secured or collateral loan is a loan secured by property having marketable value, deposited with the lender. Collaterals fall under three grand divisions: first, stocks and bonds; second, real estate; third, miscellaneous collateral. New York City banks, especially those located in the financial district, lend large sums of money on stocks and bonds. This security is of the highest grade, because its market value is known absolutely from the time the loan is made until it is paid. There is always a market for the security. These loans are made on time, demand, or on call.

77. *Time loans.*—Time loans, as their name implies, are loans that have a definite maturity date. The security generally contains a fair proportion of bonds, because the price of bonds does not fluctuate so much as the price of stocks.

78. *Demand loans.*—Demand loans are usually made to customers of banks at rates about equal to those on time loans and on similar collateral. It is the mutual understanding between borrower and lender that demand will not be made for the payment of the note,

This class of loan should not form too large a percentage of the bank's portfolio. Demand should be made at intervals for payment of the obligation in full. If it is not paid, it is very likely that the loan has been used by the borrower as permanent capital, instead of as working capital.

79. *Call loans.*—Wall Street call loans are loans secured by stocks and bonds, made to brokers, and so named because the bank reserves and exercises the right to call for payment of the loan at its pleasure. The broker reserves and exercises the right to pay the loan at his pleasure.

The bank cares very little which broker has its call money, so long as the security is adequate. Other things being equal, however, it would prefer to lend it to those who have no claim upon it and upon whom it can call for repayment without apology. There are a few brokers who keep in touch with the banks and know just where, at what rate, and how much call money can be obtained. The officers of the bank know, by eleven o'clock in the morning, whether the results of clearing have made the bank a debtor or creditor at the clearing house, and, if the latter, they communicate with the brokers who make a practice of dealing out the money on the floor of the exchange. These brokers offer the money to brokers who need it, and advise the bank of the names of those to whom they have lent the money.

Banks are cautious even with such liquid loans as Wall Street call loans. The chief points that are watched, are first, kind of security; second, the bank's title; third, the margin.

80. *Kind of security.*—All call loans are made to stock brokers who are anxious to use as many industrial stocks as the bank will allow. Good railroad stocks are, as a

rule, less speculative than industrial stocks and banks usually demand that at least sixty per cent of the securities be railroad issues. Loans on the stock of a company which has not demonstrated its ability to make money, or on stocks which have no market, should not be made.

A loan on mixed collateral is more desirable than a loan of one kind of stock or bond, for if the bank is compelled to sell the securities it will receive better returns on small lots of several securities than on a large block of one security. In the same way a loan on a low priced active stock is better than one on a high priced inactive stock.

81. *The bank's title.*—The question of the bank's title to the securities involves many important points, and is of as much interest to banks in the outlying districts as to those in Wall Street.

In the first place, the bank must be in a position, in case of default, to obtain legal title to the security in its possession. This necessitates the indorsement of the securities in blank, which must be done in proper order. In the case of Wall Street call loans, the banks require that the securities be a good delivery under the rules of the New York Stock Exchange. These rules include technical points in which the country banker or the business man is not particularly interested.

In the second place, a man cannot hypothecate something he does not own. If he produces a certificate of stock, drawn to the order of some other person, and requests the bank to make a loan upon this stock, even though it is apparently correctly indorsed in blank, the stock is of no value to the bank unless the borrower files with it a certificate or agreement signed by the person in whose name the stock is drawn, giving the borrower

the right to hypothecate the stock. This certificate, or agreement, is known as an hypothecation certificate.

82. *The margin.*—The business man should not go to the bank and expect to be granted a loan to the full extent of his security, even though that security be government or first-class railroad bonds. Banks are required by law to have a margin over and above the amount of the loan. This margin must be maintained at all times. In addition to this, when the bank examiner calls, he may instruct the bank to reduce the loan by a charge to profit and loss in order that the security may be worth more than the loan by the required margin.

Quoting from Kirkbride and Sterrett's book on "The Modern Trust Company," p. 81:

> The amount of margin which is required varies with the sort of collateral. Thus, it is perfectly safe to loan very nearly the full market value of government bonds, and of most state and municipal securities. First mortgage railroad bonds can also be taken at a higher valuation than stock and other securities readily marketable, perhaps, but less certain value. If the collateral is composed entirely of speculative stocks, a sudden break in the market may in a few hours—and before there is an opportunity to sell—turn a comfortable margin into an actual loss. In figuring margins it is important to bear in mind that in times of contraction in values, when securities are selling at a low level, a margin may be safe which in times of inflation and prosperity, when high records are being made, would be entirely insufficient to assure safety. In the former case, prices will probably stay within a moderately narrow range, while in the latter a sudden large shrinkage may occur.
>
> In New York two tests are applied to a collateral loan, the first requiring that the value of the securities must have a margin equal to 20 per cent above the amount of the loan, and the second, that the loan must have ten points margin, that is, that the amount loaned must be $10 per share less than the market

price of the stock. This is reckoned by dividing the number of shares of stock (or if bonds, $10,000 are equivalent to one hundred shares of stock) into the margin. For example, if there were 2,000 shares of mixed stocks in a loan of $100,000, divide this number of shares into $20,000 (the 20 per cent margin), and the result shows an average margin of ten points of each share held. If the ten point rule is strictly adhered to, it has the effect of discriminating against low-priced, non-dividend-paying stocks, while the 20 per cent clause requires an ample margin on high-priced stocks. There are a few institutions in New York that require nearly fifteen points with the 20 per cent margin, and some that do not adhere strictly to the ten point requirement. Outside of New York, the ten point margin test is not often applied, the usual requirement being simply 20 per cent margin on good mixed collaterals.

83. *Form of note.*—The form of note employed varies a great deal. It is usually the result of a process of evolution. A bank finds by experience that it is not protected along certain lines by the note in use and instructs its attorney to draw up a new one with a clause to cover the point in mind.

Figure 8 is a simple form of collateral note. Figure 9 is a valuable note for use when the lending bank is the custodian of securities or funds of the borrower. It gives the lending bank a lien on all remittances to it as soon as they are put in transit. Loans made to brokers in New York City are frequently paid the following day, and entirely new loans made. They are constantly changing, and much time would be lost if a new note were demanded each time a loan is made. After a broker has made several loans which have been entirely satisfactory, he is invited to sign a General Loan and Collateral Agreement and file it with the bank (see Figure 10). After filing such an agreement, he has

$..... NEW YORK,..... 190

.....after date for value received,.....hereby

promise to pay to..... ....., or order, at The B National

Bank of the City of New York.....Dollars,

with interest at the rate of.....per cent. per annum until paid, having deposited herewith the following property, as collateral security for the payment of this note, and also as collateral security for all other present or future demands of any and all kind of the holder hereof against the undersigned, whether created directly or acquired by assignment, whether absolute or contingent, whether due or not due, to wit:—

.....

.....

.....

.....

.....

..... ;

and do hereby give full authority to the holder hereof to sell the whole or any part thereof, or substitutes therefor or additions thereto, at any broker's board, or at public or private sale, at the option of the holder hereof, upon or after the non-performance of this promise, or upon or after the non-payment of any of the demands aforesaid, and without notice of intention to sell or of the time or place of sale, and without demand of payment of this note or of any of the said demands; and do hereby agree that if in the opinion of the holder hereof the value of the said collateral security or any substituted or hereafter deposited, should at any time be less than

..... Dollars,

the undersigned shall upon demand furnish such further security as will be satisfactory to the holder hereof, and in case of failure so to do, this note thereupon at the option of the holder hereof shall become due and payable forthwith, and then or thereafter the whole or any part or parts of said collateral security or substitutes or additions, may be sold as herein provided, at the option of the holder hereof; and do hereby give full authority to the holder hereof in case of any sale or other disposition of any of the collateral security aforesaid, after deducting all expenses of collection and sale, to apply the residue of the proceeds to pay any or all of said demands in whole or in part, due or not due, including this note, making a rebate of interest upon demands not due. And in case of deficiency, the undersigned agree to pay to the holder hereof the amount thereof forthwith after such sale, with legal interest.

It is also agreed and understood that upon any sale of any of said collaterals the holder hereof may become the purchaser thereof, and hold the same thereafter in his, their or its own right absolutely free from any claim of the undersigned. It is further agreed and understood that no delay on the part of the holder hereof, in exercising any rights hereunder, shall operate as a waiver of said rights.

.....

FIGURE 8

COLLATERAL NOTE

.....

$..... 190

.....after date for value received

.....hereby promise to pay to THE JERSEY NATIONAL BANK OF THE CITY OF NEW YORK, or order at said bank, in the City of New York, N. Y.,.....Dollars

with interest at the rate of.....per cent. per annum until paid, having deposited with said bank, the following property as collateral security for the payment of this note, and also as collateral security for all other present or future demands of any and all kind of the holder hereof against the undersigned, whether created directly or acquired by assignment, whether absolute or contingent, whether due or not due, to wit:—

.....

.....

.....

and do hereby give the said Jersey National Bank a lien for all of the said demands, upon all property left with said Jersey National Bank, (all remittances and property to be deemed left with said bank as soon as put in transit to it, by mail or carrier,) and upon any balance of deposit account with said Jersey National Bank, hereby authorizing said Jersey National Bank to at any time charge any and all of the said demands against the deposit account of the undersigned on the books of the said Jersey National Bank, if there be such an account; and hereby authorize said bank upon or after the non-performance of this promise or upon or after the non-payment of any of the demands aforesaid, or upon or after failure to furnish further security as hereafter agreed, to sell the whole or any part of said collateral security or substitutes therefor or additions thereto, at any Broker's Board or at public or private sale, at the option of said Jersey National Bank without notice of intention to sell or of the time or place of sale and without demand of payment of this note or of any of the said demands, and after deducting all expenses, including all for legal services arising from or incidental to the sale, realization, or collection of any of said collateral security, substitutions or additions, or of any of said demands, including this note, to apply the residue of the proceeds to pay any or all of said demands in whole or in part, due or not due, including this note, making rebate of interest upon demands not matured by their terms; and do hereby agree that at any such sale the said Jersey National Bank may become the purchaser of any or all of said collateral security and may hold the same thereafter in its own right absolutely free from any claim of the undersigned; and do further agree that in case of deficiency the undersigned will pay to the said Jersey National Bank the amount thereof forthwith after such sale with legal interest; and do further agree that if in the opinion of said Jersey National Bank or any of its officers the value of the said collateral security or any substituted or hereafter deposited shall at any time be less than.....DOLLARS, the undersigned will immediately furnish such further security as will be satisfactory to the Jersey National Bank, and that in case of failure so to do, this note thereupon at the option of the said Jersey National Bank shall become due and payable forthwith, the said Jersey National Bank being also authorised in such case to sell the collateral security or any part thereof as above provided; and it is hereby further agreed that upon the transfer of this note the Jersey National Bank may deliver the said collateral security or any part thereof to the transferee who shall thereupon become vested with all the powers and rights above given to the said Jersey National Bank in respect thereto, and the said Jersey National Bank shall thereafter be forever relieved and fully discharged from any liability or responsibility in the matter. It is further agreed and understood that no delay on the part of the holder hereof, in exercising any rights hereunder, shall operate as a waiver of said rights.

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FIGURE 9

COLLATERAL NOTE

GENERAL LOAN AND COLLATERAL AGREEMENT.

In order to obtain loans from and otherwise deal with The ..... National Bank of the City of New York, the undersigned agrees that all loans, advances or credits hereafter obtained from said bank by the undersigned shall be repayable by the undersigned at said Bank upon demand unless otherwise agreed in writing at the time, and shall bear interest at rates to be agreed upon; and the undersigned further agrees that as collateral security for any and all loans, indebtedness, obligation and liability of the undersigned to said Bank, now or hereafter existing, matured or not matured, absolute or contingent, and wherever payable, including such as may arise from endorsements of notes, acceptances or any other items, or paper discounted by said Bank or held by said Bank as security for any loans or advances of any sort whatever, and including overdrafts, and indebtedness by the undersigned to said Bank, on account of collections or paper received for collection, said Bank shall hold, retain and have a lien upon all moneys, negotiable instruments, bonds, stocks, commercial paper, credits, choses in action, claims and demands of every kind at any time in possession or control of said Bank or any of its agents or correspondents, or in transit to it by mail or carrier, belonging to, for account of or subject to the order of the undersigned; and said Bank shall have the following rights and powers in respect to such collaterals, and every part thereof (in addition to any other rights which it may have): said Bank may at any time or times collect any of such collaterals, and it may endorse any thereof in behalf and in the name of the undersigned; and in case of failure of the undersigned to pay or discharge when due any such loan, indebtedness, obligation or liability, or in case of failure of the undersigned to furnish additional collateral as hereinafter provided, or in case of the insolvency, general assignment, bankruptcy or failure in business of the undersigned, said Bank may sell without notice any of said collaterals at private or public sale or at broker's board (being at liberty to become the purchaser if the sale is public or at broker's board) and may apply any and all money or credits, including the proceeds of any such sale, and any debts, liabilities or balances, due or not due in favor of the undersigned, arising from deposits, discounts, collections, items in transit, or otherwise, at any time owing or due from or chargeable against said Bank, or any of its agents or correspondents, to the payment of expenses of any such sale or sales, or of the realization or collection of any of said collaterals, or of any of said loans, indebtedness, obligation or liability of the undersigned, and to the payment of any or all loans, indebtedness, obligation or liability of the undersigned, whether due or not due; and any or all loans, indebtedness, obligation or liability of the undersigned shall in any of the cases above stated become due at the option of said Bank. If the collaterals at any time securing any loans, indebtedness, obligation or liability of the undersigned to said Bank shall any time be unsatisfactory in amount or otherwise to said Bank, or to any of its officers, the undersigned will immediately furnish such further security as will be satisfactory to said Bank. Said Bank may assign or transfer the whole or any part of any indebtedness, obligation or liability of the undersigned, and may transfer therewith as collateral security therefor, the whole or any part of the collaterals above referred to, and the transferee shall have the same rights and powers with reference to the indebtedness, obligation or liability transferred, and the collaterals transferred therewith, as are hereby given to said Bank.

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New York,.....190

FIGURE 10

GENERAL LOAN AND COLLATERAL AGREEMENT

only to present his collaterals in proper shape in order to receive his check.

84. *Relative value of stocks.*—The relative value of railroad and industrial stocks has been hinted at in the discussion of brokers' call loans. There is a third class, known as quasi-public stocks, which have come into prominence in the last five or ten years. These quasi-public stocks include street railways, electric light, heat and power companies, gas companies, telegraph and telephone companies, and the like. They are of a much higher class, as a whole, than are the industrial stocks. The operations of public utility companies are carefully watched by public service commissions and the companies are not allowed to issue securities without the consent of these commissions. The public, consequently, places confidence in such issues.

The attitude of the Interstate Commerce Commission, with reference to the raising of rates, and of the Wilson Administration with reference to the construction of the Sherman Anti-Trust Act, has kept the railroad companies in a state of fear for many years.

Industrial stocks are issued by corporations engaged in businesses other than the two already mentioned. Each security must be considered on its merits. The business of these corporations is not subject to review, except as it violates the Sherman Anti-Trust Act.

Some stocks are liquid and some are slow, that is, some can be disposed of whenever there is a need, and some cannot be disposed of so easily. A careful banker will not accept loans secured by the latter.

85. *Bonds.*—The manufacturer or merchant expects much larger profits from the operation of his business than he can possibly secure from a safe investment in any kind of bonds. He is, therefore, usually not concerned with investments. He prefers to turn the money

back into the business where he will reap larger returns. Business men realize, however, the advantage of investing reserve and other special funds in interest-bearing securities having no connection with their business. If a business or the profit from it is susceptible to violent fluctuations, it is a conservative policy to invest a part of the unusual profits in bonds to be held as an "anchor to windward." Private funds are more frequently invested in securities than the surpluses of business operations.

Bonds are divided into four classes: first, United States, state and municipal; second, railroad; third, public utility; fourth, industrial. We shall not discuss the numerous sub-divisions of these classes of bonds, nor the relative advantages of each as an investment for the business man. The interested reader is referred to the volume on "Corporation Finance" of the Modern Business series for a more detailed discussion.

United States, state and municipal bonds are those issued by the federal, state and municipal authorities as the case may be. The federal government sells bonds to pay the cost of war, to build warships, and to construct such public enterprises as the Panama Canal. It is provided that bonds may be issued to meet deficits in revenue and to keep the various kinds of money at parity with gold (see page 220). The states issue bonds to build canals, to purchase lands for state parks, etc. The cities, likewise, borrow money for various purposes. These issues are considered to be safe investments.

Railroad bonds are bonds issued by railroad companies for the purpose of building roads and terminals, buying cars or engines, retiring old bond issues, and similar purposes. Sometimes the railroad owns a large block of the stock or bonds of another company or allied interests, and deposits these securities as collateral for a

bond issue. Sometimes the bonds issued by a railroad are merely debentures, that is, the obligation of the railroad, not secured by any specific lien on its assets. As a rule, railroad bonds are well secured and very desirable when safety is the chief consideration.

Public utility bonds have come into prominence in recent years, because of a nation-wide movement to regulate their issue. They are considered desirable investments, both from the standpoint of safety and earning power.

Industrial bond issues cover a very broad field, from the bonds of a local industry to the first mortgage bonds of the United States Steel Corporation. Some of these issues are good, some are not; each must be judged on its own merits.

86. *Market value.*—The banker may be called upon at any time to decide whether or not he will grant an application for a loan, secured by one or more of these stocks or bonds. He must know what each is worth, or at least where to ascertain the market value of any issue that may be presented to him. He may obtain this information in various ways. The daily papers quote the market value of all the active issues. The financial supplements of the Commercial and Financial Chronicle give him the most complete information regarding any issue. He may find here quotations of actual sales or what are termed "bid and asked quotations" for those in which no sales have been recorded. Then, again, he may secure the information from the various financial journals, official quotation sheets issued by the exchanges, or from bankers and brokers who deal in the securities.

87. *Listed securities.*—A loan made on listed securities is more valuable than one made upon unlisted secur-

ities. The term "listed" means that dealings in the particular issue, whether of stocks or bonds, are permitted on the floor of a stock exchange. In practical usage it refers to the issues listed on the New York Stock Exchange. It further indicates that application has been made to the proper committee of the exchange for the listing of the issue, and that this committee has made an investigation of the issue and of the collateral back of it, and has approved of the security. The exchange makes no subsequent investigation or inspection.

88. *Unlisted securities.*—So-called unlisted securities, whether stocks or bonds, are those securities which have not been accepted by a stock exchange. They are bought and sold over the counter of the banking houses and by the brokers on the curb market. The curb market is simply a loosely-organized group of men who meet on the corner of Broad Street and Exchange Place, New York City, and deal in stocks and bonds for their clients. The reader who wishes to make a further study of this subject should refer to the volume on "Investment and Speculation," Chapter V, where will be found a detailed discussion of the listing of securities, and of the different kinds of issues.

89. *Loans on warehouse receipts.*—Banks are called upon frequently to advance money on the security of goods in storage, represented by warehouse receipts. These receipts are negotiable and represent actual goods having marketable value and ought to be as good security as commercial paper, minus the moral value of the extra name. Great care must be exercised in handling this class of loan, to see that the papers are in proper form, that the goods are properly insured, etc. The bank should confirm the statement of the borrower as to the value of the goods stored, and should demand

ample margin. The borrower should reduce the loan every time he makes a delivery of goods. The warehouse will see that all deliveries are indorsed on the certificate. Loans should never be made on receipts covering tobacco and liquors, unless the commodities are stored in bonded warehouses.

90. *Loans on assigned accounts.*—This form of collateral loan appears when concerns are unable to borrow on their own name or to secure notes of customers for goods sold. They regard their accounts receivable as valuable assets. Such accounts, however, ought to be discounted considerably as collateral security. Borrowers who endeavor to secure loans on this kind of security have in all probability borrowed to the limit of every other kind of asset and therefore need watching. The practice is for the bank to take an assignment of the large accounts, with the understanding that the bank instead of the borrower is to receive all payments on account and apply all receipts to the reduction of the loan, returning the balance to the borrower. This involves considerable work, not to mention the rigid investigation that must be made on the financial standing of every account assigned to the bank. The laws of the different states prohibit a bank from charging a rate high enough to make this kind of loan profitable.

The practice of giving notes in settlement of accounts is rapidly passing away. It is doubtful whether it can be revived even if the federal reserve banks should encourage the practice by giving such notes preference over others in the re-discounting privilege. It is possible that we may, in time, adopt the European practice of accepting drafts for goods sold. Until some change is made, however, the merchant or manufacturer who has a large amount of accounts receivable on his books must

regard them as something to assist him in borrowing from his bank. They are, however, part of his general standing rather than collateral security for loans.

91. *Loans on insurance policies.*—A banker is often requested to make a loan on the security of a life insurance policy. If the policy has a cash surrender value it is a safe loan so far as the security goes, but it may be a hard one on which to realize. Such loans usually have a sufficient amount of sentiment connected with them to compel the banker to make the loan. In most cases the policy is accepted by the banker more as a moral than an actual security. George Rae in his book "The Country Banker" says regarding life policies as collateral security: "But the inability to pay a sum owing to a bank has not ordinarily a fatal effect on the life of the debtor: It is frequently quite the reverse."

If the policy is accepted it should be assigned to the bank by the beneficiary and the assignment recorded with the company. The bank should see that all premiums are paid promptly as they fall due.

92. *Loans on chattels.*—It is a rare thing to find loans on chattels among a bank's assets. The writer once found a loan which was secured by a pledge of wedding silver. This silver had lain in the bank's vaults for years. It was out of date and while there was enough of it to secure the loan, it is doubtful if the entire lot could have been sold for one-quarter of its original value. Loans on horses, wagons, and similar equipment are sometimes made, but the cases are so rare that they hardly need to be described at length. They are not valuable as bank collateral.

Chattel mortgages are frequently recorded by those who are disposing of certain kinds of goods sold on the installment plan. A reference to the local official record

will indicate the character of this class of selling that is being practiced in any community. It will also be of much interest to the business man. The recording of a chattel mortgage is always a signal to creditors. Dealers are accustomed to watch closely the record of assignments. Careful bank officers, doing a local business, watch these official records just as closely as do the business men. This is the chief reason for referring to a record of chattels.

CHAPTER IX

REAL ESTATE LOANS

93. *Real estate loans.*—Real estate loans have been the subject of much discussion since the Panic of 1907. From the banker's point of view they have their advantages. On the one hand it is doubtful if there is a better form of investment for long time funds. Each loan is complete in itself. Granted that careful examination of the property has been made by those competent to judge of its value and that the sundry details of the loan are carefully attended to, there are few investments quite as safe. On the other hand, real estate loans are not good investments for demand or short time deposits. They lack the liquidating qualities that listed stocks, bonds and commercial loans possess, in cases of emergency.

Liens may be created on real estate in the following ways:

94. *Building loans.*—A building loan is a loan made to a builder, as a rule, upon which advances are made as the building progresses. The lots are usually owned free and clear. In New York State, it is necessary that an agreement be made between the lender and the borrower setting forth the entire contract. This agreement must be in writing and filed in the office of the

County Clerk in the county in which the property is situated in order that mechanics' liens may not have priority of lien over the mortgage to secure the building loan.

This agreement contains a schedule of payments to be made at certain stages of the work. It is the endeavor of the lender to advance no more than is safe, considering not only the expenditures made on the building at the time of the advance but also the trouble and risk of trying to finish an uncompleted structure in case the borrower should fail during the course of construction.

These payments vary, but the following may be considered as illustrative in the case of a loan of $50,000 on a five-story apartment house in which an advance of $20,000 is made upon the land:

1. On land	$20,000
2. When foundations are completed and first tier of beams laid	2,500
3. When all walls, including fronts, are up to third story and beams laid	2,500
4. When all walls are up to fifth story and beams laid	2,500
5. When building is enclosed, the roof is watertight, parapet and coping walls finished and leaders connected with sewer	3,000
6. When studding is done, rough floors laid, plumbing lines laid to outlets, steam risers set and gas and electric conduits in	3,000
7. When the boiler is set up, lathing and scratch coat of plaster completed, iron stairs set and temporary treads laid	2,500
8. When white plastering is done, except halls and stairs, windows in, bath rooms tiled and plumbing ready for fixtures	3,000

9. When plastering is completed, including ornamental work, plumbing fixtures set, boiler connected and radiators temporarily connected if necessary for heat, and standing trim, including bases, fixed..... $4,000
10. When sidewalks, yards and cellars are concreted, basement apartment completed, permanent stair treads set, marble work set in main hall and vestibule, tile floors laid in vestibule; main hall and stair landings, doors hung and finished floors laid..... 4,000
11. When painting, varnishing and rubbing is done, gas and electric fixtures hung, refrigerators and ranges in, decorating completed, hardware and plumbing faucets on, building ready for occupancy and certificates issued. 3,000

This contract is frequently modified slightly so that part of the money is held until a stated time after completion.

Mechanics and material men are paid out of the money received at each advance.

95. *Partial payment or instalment mortgages.*—A partial payment or instalment mortgage provides that the mortgagor may reduce his mortgage by partial payments. These payments are made as a rule, when interest is paid. An instalment mortgage usually provides for monthly reductions. Fixed payments are made, a part of which is applied to the payment of interest on the loan, and the balance to the reduction of the principal of the mortgage. It is evident that as the loan grows older, the proportion of the monthly payments applicable to the reduction of the principal increases, and the proportion applicable to the payment of interest decreases.

96. *Straight mortgage.*—A straight mortgage is a mortgage made for the full amount needed. This amount is paid by the mortgagee to the mortgagor immediately upon the completion of the arrangements. The mortgage runs for a given number of years, usually three, and is due and payable at the end of that time. Such a mortgage may be, and frequently is, renewed from year to year after its first maturity. The interest is usually payable semi-annually. A straight mortgage may be a first, second, or even a third mortgage.

97. *Blanket and purchase money mortgages.*—A blanket mortgage is a mortgage given to cover or secure to the mortgagee any or all loans due, or to become due, from the mortgagor. It is frequently given to a bank to cover loans made on notes of the borrower, or on bills receivable, when the bank wishes to have some security other than the names appearing on the notes.

A purchase money mortgage is a mortgage given by the purchaser to the seller at the time of the sale of the property. It may be subsidiary to existing liens.

98. *Judgments.*—"A judgment is a determination of the rights of parties by action at law." If the judgment involves the payment of a debt, it becomes a lien on the property of the debtor. Action is enforced by the sheriff. Public notice is given by means of what is termed a judgment docket. The judgment becomes a lien at the time of the docketing. Judgment may be enforced by execution as often as the creditor thinks there is property in the hands of the debtor.

99. *Mechanic's liens.*—"A mechanic's lien is a statutory remedy to enforce payment of claims for work and materials by sale of the property on which the work is done." A contract relation must exist before a mechanic's lien can be recorded. That is, there must be

an agreement between the owner of the property and the mechanic or material man for the performing of the work or the delivery of the materials. The mechanic's lien is enforced by filing in the County Clerk's office, within ninety days after the completion of the work, a notice that payment has not been made and later suing in foreclosure proceedings if necessary. The property is bound for one year after the filing of the lien. The lien may be continued if action to foreclose has been begun. Liens on public improvements must be filed within thirty days after the completion of the work. All mechanic's liens must be satisfied and record made in the proper office of such satisfaction, before mortgages will be given.

Mechanic's liens may be satisfied in one of three ways:

a. By payment.

b. By depositing money with the County Clerk, ending suit. Under these conditions a lien is said to be satisfied by deposit.

c. By filing a bond pending suit. It is then said to be discharged by bond.

100. *Conditional sales.*—Another lien is the conditional sale. A conditional sale is not strictly a lien on real property, but upon personal property which may be used in connection with real property. Appurtenances are sometimes purchased upon the condition that title shall not pass until payment in full has been made. This contract is valid between the buyer and the seller and, if properly recorded, is valid against those coming into possession of the property after the recording of the instrument. Elevators, special gas and electric fixtures, etc., are often subject to conditional bills of sale. A lien of this kind must be recorded frequently.

101. *Decedent's debts.*—Still another form of lien on real property is the lien of decedent's debts. At the moment of death, creditors have a claim on the property, both real and personal. The property of the decedent must be administered so that creditors shall be paid before heirs, next of kin, or legatees. The ordinary method of procedure is that creditors shall resort to the assets in the following order:

(a) Personal property not bequeathed specifically,
(b) Personal property specifically bequeathed,
(c) Real estate.

102. *Transfer tax.*—Another form of lien of this class is a lien of transfer tax. The State of New York taxes the transfer of the property of deceased persons. This tax is more in the nature of an excise, since it is levied on the transfer, but is in effect a tax, because it is deducted from the property.

The state may require that property be sold in order that the tax may be collected. Should the property be transferred before the tax is paid, the tax is still a lien on the property.

103. *Ordinary taxes.*—Then, again, there is the lien of ordinary taxes. Taxes are an enforced and regular contribution to the support of Government. The lien of taxes is a general lien. Even though the tax must be borne by the seller as soon as it is definitely fixed, it is not collectible until the sale is consummated.

104. *Assessments.*—Assessments are special taxes levied upon specific property benefited by local improvements, for the purpose of contributing to the expense of such improvements.

105. *Assigned bond and mortgage.*—Another form of real estate loans made by banks is made upon a note secured by an assignment of a bond and mortgage. In

this case, the borrower owns a mortgage on a piece of property, instead of the property itself. If he has no other collateral and this is acceptable to the bank, he may give his note and assign the bond and mortgage as collateral security.

Every bond and mortgage must be accompanied by the following papers:

(a) Bond.

A bond is only a sealed conditional note. "It is an obligation by deed whereby the obligor binds himself, his heirs, executors, administrators, successors, or assigns, to pay a certain sum of money to another upon conditions therein specified." In taking a bond and mortgage by assignment the purchaser should ascertain that no reductions have been made by partial payments, and that the bond is signed, witnessed and acknowledged before a notary or Commissioner of Deeds.

(b) Mortgage.

A mortgage is a contract which gives to the one in whose favor it is made the exclusive right to sell the property named in it, as a means of procuring funds with which the note (bond) secured may be paid when due. In form, the mortgage is a conveyance of property with the condition that if the debt is paid the conveyance becomes void.

(c) Assignment of the Mortgage.

If the mortgage is not drawn in favor of the bank, an assignment must be obtained from the last owner. It is a separate instrument conveying title to the bond and mortgage.

(d) Search.

A search is a report made by a competent attorney after a thorough examination of the real estate records. This report is usually found in condensed form showing liens that have been recorded giving dates of the liens, parties at interest, amounts, and also the dates of satisfaction.

(e) Abstract of Title.

An abstract of title is a synopsis of deeds, encumbrances, and other records affecting titles to lands, and whenever possible, dates back to the original patent.

(f) Title Policy.

A title policy is a form of insurance in which the party at interest is insured against loss of property through defective title, except as noted in the schedules attached to the policy.

(g) Appraisal.

An appraisal is a report, written by an expert, showing the value of the premises covered by the mortgage. Usually, the value of the lot and the improvements are shown separately. The New York State Banking Law provides as follows:

"No corporation, except a savings and loan association, shall make a loan directly or indirectly upon the security of real estate if the lien exceeds two-thirds of the appraised value of such real estate as found by a committee of the directors or trustees of such corporations." This makes it necessary for a committee of the directors or trustees to visit the

property, or otherwise estimate its value before the loan is granted.

(h) Insurance.

The mortgagee, whether corporate or private, should require the mortgagor to carry sufficient fire insurance to protect the loan. The policies are usually issued in the name of the mortgagor and assigned to the mortgagee. A paster is attached to the policy, reading "Loss, if any, payable to ——— mortgagee as his interest may appear." Fire insurance should be kept up to date, for, should a building burn down a few hours after the insurance has expired, all parties concerned would incur serious loss. Mutual fire insurance companies doing business in a local district, should be shunned because, in the event of a serious conflagration, the demands upon them would be so great that it would be impossible to realize the amount involved.

(i) Satisfaction Piece.

In law, a satisfaction is an entry on the records announcing payment on a judgment or other lien; or an extinguishment of some existing right or claim. A satisfaction piece, therefore, is an instrument in writing by which the owner of a judgment or other lien acknowledges full payment. It is given by the holder of the mortgage to the mortgagor, and should be recorded immediately, in order to clear the property of the lien.

106. *The Torrens system.*—In discussing the papers necessary to make a real estate loan complete and safe,

it might be well to mention the Torrens System of land registration, which has been adopted in some countries with much success.

There are three historic methods of dealing with transfers of real property.

(1) Transfer by instrument unrecorded and simply held by the owner. The weakness of a system of this kind is apparent.

(2) Record of instruments of transfer and encumbrance, and giving of constructive notice of such record. This is the method employed in New York and in most of the other states. It grows more cumbersome as it grows older, and tends to break down of its own weight. Among the disadvantages of this system are: a serious multiplication of records, complication of titles, repeated expense, and delays in re-examining titles.

(3) Registration of titles as distinguished from registration of documents. This is what is embodied in the so-called Torrens law, originally adopted as a means of assuring titles and of facilitating transfers.

The Torrens System of land registration was devised by Robert Torrens, Collector of Customs, Port Adelaide, South Australia. From his knowledge of the methods of transferring and mortgaging ships he derived the idea that real estate might be handled in a similar manner. The system was adopted in Australia in 1857 and rapidly spread through the Australian colonies. It was adopted in England in 1889 and later in Germany, Austria-Hungary, Switzerland and parts of the United States and Canada.

107. *Objects of the Torrens law.*—The objects of the Torrens law are: (1) to give greater security and certainty to titles; (2) to avoid the necessity of long and repeated examination of titles; and (3) to make real

property more available as security for obligations and assets.

In the application of the law in the United States, two serious questions present themselves: (1) Can these desirable features be obtained constitutionally? (2) If so, can they be obtained in such a way as to be practical and advantageous?

The principle underlying all land title registration is that a certificate, having been given to the reputed owner of a piece of property, is indefeasible. This indefeasibility of title is effected by serving notice that a title is to be granted and requiring all who have objections to the granting of the title to appear and file them. There is always uncertainty, however, as to whether due notice has been given to everyone who has an interest in the property. The notice sets a time limit within which objections may be raised. It is assumed that, "so long as the time fixed for the running of such a statute is reasonable, the statute is constitutional." Those who criticise the method assert that the fourteenth amendment to the constitution of the United States is violated by a procedure of this kind. This amendment provides as follows:

> No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of right, liberty, or property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws.

It is a question whether or not the time limits set by the various states within which objections may be filed, are in contravention of this amendment.

The system has progressed slowly in this country, on

THE HOWARD TRUST COMPANY OF NEW YORK.

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The Undersigned desires to procure a Loan of $.....

at.....per cent. Interest per annum for.....year....on.....Mortgage

secured by Bond of.....

.....

Location.....

Dimensions of Ground.....

Dimensions of Building.....

Description of Building.....

Building Materials.....

Purposes of Use.....

Value of Ground, $.....
Value of Building, $..... } Total, $.....

Annual Rent, $.....

Name.....

Address.....

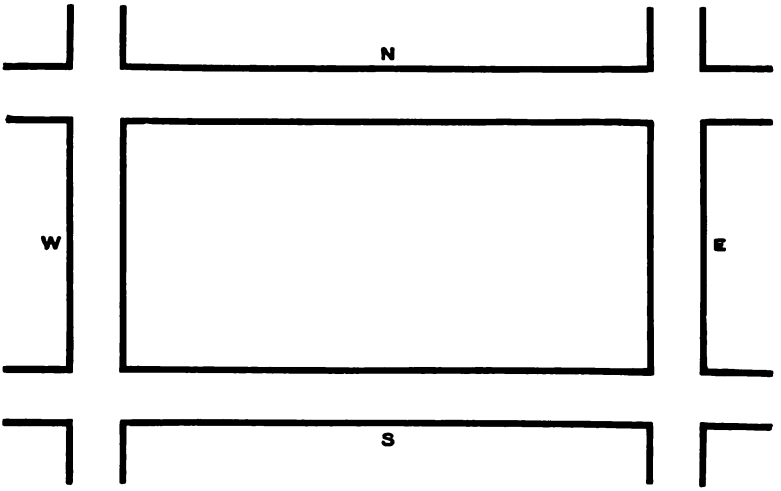

FIGURE 11.

APPLICATION FOR REAL ESTATE LOAN

account of the initial expense of registration, the constitutional objections referred to, the opposition of attorneys, and general conservatism.

If a property is accepted under the Torrens System, a certificate, similar to a certificate of stock, is issued, insuring the title. Mortgages or other liens on the property are recorded on this certificate.

108. *Records.*—The bank or trust company requires the applicant for a real estate loan to fill out a form similar to that shown in Figure 11. This application, together with such other information as the officer deems pertinent, is presented to the executive committee. When there are many applications, they are turned over to a sub-committee, known as the real estate committee, for investigation and report. The real estate committee visits the property and makes a written report on the back of the application, or on a separate sheet to be attached to the application. The simplest form of report states that the members of the real estate committee have visited the property and estimated the value of the land and the buildings, and recommend the granting of a loan on the premises, not to exceed a stipulated amount. This report may be more complex, and include an independent statement, by the committee, of the methods of calculating the value of the land, and the various features entering into the value of the buildings. These applications are filed, either with the papers in connection with the loan or in a loose-leaf binder.

If the loan is approved, the borrower signs a bond and mortgage, which is promptly recorded, turns over the insurance policies to the bank and receives his check for the amount of the loan.

Real estate loans require careful accounting, in order that all the details may receive proper attention. In

the first place, if there are many loans, it is necessary to have a system of indexing. One index should be arranged according to location of properties, another by names of mortgagors, and another by names of insurance companies, though the last is not essential. A diary or tickler in which to record sundry maturity dates is necessary since it is important that the date of maturity of the loan, the interest dates, the maturity of fire insurance policies, and the taxes be called to the banker's attention in proper time.

109. *Participations.*—It is a common practice among trust companies when they have deposits of estates to invest, to grant participations in real estate mortgages. If the amount standing to the credit of an estate is not sufficient to make a satisfactory investment, the trust company shares one of its own mortgages with the trust fund. This it does by entering a record on its books, charging the account of the estate and crediting its own investment account "Bonds and mortgages" with the amount it wishes to invest for the estate. It then issues a certificate to the estate, declaring that on the day of the transfer, it set aside such and such an amount of such and such a bond and mortgage for the account of the estate, and further, that it holds this amount for the account and risk of the estate. This certificate is filed with the other securities held in connection with the trust. Sometimes a bond and mortgage of this kind is divided among several estates. As interest or principle is paid, it is divided among the various participants in the proportion of their holdings.

Although a strict construction of the rule laid down for the investment of trust funds might compel a trust company to keep each trust separate and distinct from both the investments of other estates and its own funds,

it is probable that, if a case were carried to court it would be decided in favor of the practice of granting participations.

110. *Banking laws regarding real estate loans.*—In the past, one of the essential points of difference between national banks and state banks has been the fact that the former have not been permitted to make loans on real estate security, while the latter have, though under restrictions.

The new Federal Reserve Act gives national banks the following privileges with reference to real estate loans:

"Section 24. Any national banking association not situated in a central reserve city may make loans secured by improved and unencumbered farm land, situated within its Federal reserve district, but no such loan shall be made for a longer time than five years, nor for an amount exceeding fifty per centum of the actual value of the property offered as security. Any such bank may make such loans in an aggregate sum equal to twenty-five per centum of its capital and surplus or to one-third of its time deposits and such banks may continue hereafter as heretofore to receive time deposits and to pay interest on the same.

The Federal Reserve Board shall have power from time to time to add to the list of cities in which national banks shall not be permitted to make loans secured upon real estate in the manner described in this section."

Section 108 of the New York banking laws, paragraph 4, reads as follows:

SECTION 108, SUB-DIVISION 4

A bank subject to the provisions of this article—

4. Shall not make a loan, directly or indirectly, upon the security of real estate if:

(a) Such real estate is subject to a prior mortgage, lien or encumbrance, and the amount unpaid upon such prior mort-

gage, lien or encumbrance, or the aggregate amount unpaid upon all prior mortgages, liens and encumbrances exceeds ten per centum of the capital and surplus of such bank, or if the amount so secured, including all prior mortgages, liens and encumbrances exceeds two-thirds of the appraised value of such real estate as found by a committee of the directors of such bank;

(b) The bank has its principal place of business in a borough of any city in the state which borough has a population of two millions or more, and the total direct and indirect loans by the bank upon real estate security exceed, or by the making of such loan will exceed, fifteen per centum of the total assets of the bank;

(c) The bank has its principal place of business in a village which has a population of not more than fifteen hundred, and in which there is no savings bank, and the total loans by the bank upon real estate security exceed, or by the making of such loan will exceed, forty per centum of its total assets;

(d) The bank has its principal place of business elsewhere in the state, and its total direct and indirect loans upon real estate security exceed, or by the making of such loans will exceed, twenty-five per centum of its total assets.

The limitations and restrictions contained in this subdivision shall not prevent the acceptance of any real estate securities to secure the payment of a debt previously contracted in good faith, but every mortgage and every assignment of a mortgage taken or held by such bank shall immediately be recorded in the office of the clerk or the proper recording officer of the county in which the real estate described in the mortgage is located.

The laws of the various states with reference to the power of banks and trust companies to make real estate loans differ. In general, however, they are permitted to lend on the security of real estate under prescribed restrictions.

111. *Real estate as collateral.*—The value of real

estate loans as an investment for banking funds varies according to the institution and the kind of money to be invested.

The following comment on the real estate provisions of the federal law, from Pratt's Digest for 1910 (page 28), sets forth the arguments for and against loans on real estate very clearly:

"The prohibition against loans on real estate is a feature of the law which has been much criticised in some quarters; and as evidence that this restriction upon the powers of national banks is unreasonable and unnecessary, it is urged that real estate is the best kind of security; that savings banks, trust companies, and insurance companies are authorized to make such loans; and why, therefore, should not the national banks be permitted to do the same? But, by the great majority of bankers, the restriction is deemed wise and salutary. The objection to real estate security is not to its *sufficiency*, but to the *kind*. As the obligations of the banks are largely payable on demand, it is necessary that the securities it holds should be readily convertible into money; and while a mortgage upon real estate may be good security, it cannot be made immediately available, in case of an emergency. Personal securities of the kind usually taken by banks can be quickly assigned, and promptly realized upon; but the transfer of any interest in real estate is always attended with more or less delay. It has not infrequently been the case that banks have been compelled to suspend when their assets were more than sufficient to pay their debts, simply because a large portion of the assets were real estate securities, upon which it was impossible to realize at the proper time. In the case of insurance companies, trust companies, savings banks, and similar corporations there is not the same necessity for having the assets in a convertible form, but it is rather desirable that a large portion of the investments shall be of a more or less permanent character; and, therefore, real estate loans are well adapted to their purpose."

Part of the deposits of trust companies consists of long time funds. If a trust company has a large proportion of this class of deposits, it usually invests in real estate loans. If it wishes to compete with other banks, however, for commercial deposits, it should not invest any part of its deposits in these long time investments, but should follow much the same procedure as a commercial bank.

As an investment for trust funds, real estate loans fulfill practically every requirement. The objects sought are, first, security; second, yield; third, permanency of investment. Each of these objects is important to the beneficiaries of the trust. As a rule, there is nothing so secure as a first mortgage that has been carefully investigated. It is especially secure if there are junior mortgages, because the owners of these mortgages must protect the first mortgage, in order that they may be secure themselves. The investment, then, that is made for terms of three or five years, is practically permanent, because few mortgages that find their way into trust funds are paid off. The renewal from time to time makes it possible to change the rate of interest if there is a marked change in the rate, and to change the margin of security if the property depreciates materially. If the conditions are normal when the loan matures, it is frequently carried in the trust fund as a demand mortgage, which may be called at any time after reasonable notice. It is practically a year to year loan.

The foregoing remarks regarding real estate loans for trust funds apply with equal force to savings banks. Savings banks, as a rule, are not allowed to accept commercial deposits. They are generally permitted to require sixty days' notice before payment of deposits,

making it possible for them to adjust or realize on their investments in case of unusual demand. The investment, therefore, that gives them absolute security, a high yield, and is at the same time permanent, is the most desirable for savings banks.

Co-operative loan associations, and bond and mortgage guarantee companies, are organized for the sole purpose of investing in real estate loans.

The business of insurance companies resembles somewhat that of trust companies and savings banks, as far as investments are concerned. Their investments must be sufficiently liquid to meet unusual demands. The bulk of their investments should be long time and of a high yield. Real estate loans are excellent for this purpose.

An individual with money to invest, who possesses considerable knowledge of the value of land and buildings, and who has a good lawyer, will find real estate loans a satisfactory investment. When investments are made in real estate mortgages by individuals, second mortgages are taken, as a rule, and commission charged in addition to the interest. Second mortgages are made for short terms, frequently as short as one year. The commissions range from ten to twenty per cent. No one should engage in this kind of loan unless he keeps plenty of ready money on deposit, to protect himself in case the mortgage having priority to his is foreclosed.

CHAPTER X

ESTABLISHING BANK CREDIT

112. *The first loan.*—The time to prepare for trouble is when everything is moving along smoothly. The time to build up credit is when there is least need for it. Credit cannot be established over night—it is the result of years of patient toil and planning. No one knows when he may have an urgent need for credit, and it is wise to be prepared.

Every young man should open a bank account as early in life as possible, pay his bills by check, and learn to transact his business in the systematic way that the keeping of a bank account requires and facilitates.

When he knows that he can meet a moderate obligation at his bank in sixty, ninety or even one hundred and twenty days, he should make an application for a loan. Let him buy a thousand dollar bond of a good safe industrial concern or a railroad, paying $500 down on it, and leaving the balance as a loan. Before buying the bond he should consult his banker, for advice, as to the best bond to buy. The average banker will be glad to investigate the bonds which attract the young man and to suggest the best kind to buy. The application will undoubtedly be granted, since it is evident that the

young man is earnest in his desire to improve his finances.

He should draw a note for no more than he knows he can pay within a given length of time, which should not be longer than four to six months. The banker may be willing to carry the loan on demand and permit monthly reductions. If the note is drawn for a definite length of time, the young man should be in a position to pay it with interest at maturity. After a reasonable time he should make another loan, provided he is in a position to pay it promptly at maturity. It will not take more than two or three such transactions with a banker to establish a reputation, provided the loans are made and paid in a business-like way. Then, should he become suddenly in need of funds for a short time, he will be able to secure the money without difficulty, since he will have a form of collateral that appeals to the banker.

Many business houses have followed the same plan and have made applications for loans when not in need of funds, in this way establishing with their banks borrowing relations which stood them in good stead in time of need.

113. *Purposes for which loans are made.*—Loans may be made for various purposes, which may be classed roughly as follows:

1. Commercial
2. Repairs and renewals
3. New construction and machinery
4. Miscellaneous purposes.

Loans for commercial purposes may be classed roughly into three divisions:

a. To convert bills receivable into cash
b. To take advantage of discounts

c. To take advantage of markets.

114. *Commercial loans.*—Loans made to convert bills receivable into cash, the simplest type of commercial loans, have been discussed at length in a previous chapter. These loans are the result of actual sales of goods, represented by notes passing from the purchaser of the goods to the seller. The notes themselves represent particular transactions which are liquidated by the money received from the sale of the goods to the ultimate consumer.

Commercial loans made to take advantage of discounts offered by the seller of the goods, have been described under the head of commercial paper. No further details need be given here. These loans also are made for strictly commercial purposes, and are intended to be liquidated by the sale of goods to the ultimate consumers.

Commercial loans may be made to take advantage of low prices of raw materials. If these raw goods can be converted rapidly into finished products which can be liquidated within a reasonable length of time, the transaction is the basis for a loan. This form of loan requires a greater length of time to liquidate than does the loan made to take advantage of discounts. In the latter case, goods are rarely purchased until needed, while in the former, they must be bought long before they are required. There is a slight danger of speculation in this class of purchasing that is not present in the case of buying to save money.

The commercial loan, in short, is one made to finance the producing or marketing of goods. It is liquidated customarily by the sale of the goods to the ultimate consumer, and is the only kind of loan that a bank having demand deposits should accept.

115. *Repairs and renewals.*—It may be that by investing a few hundred or a few thousand dollars in repairs or renewals, a concern will be able to make much larger profits than formerly. If this is evident, an application should be made for a loan if there are not sufficient funds on hand. The business man should not, however, approach a bank with the feeling that his application should be granted without serious consideration.

116. *New construction and machinery.*—The construction of buildings and the purchase of machinery is a capital expense. Banks do not care to furnish capital to weak concerns. They aim rather to supply money to strong concerns for working capital needed to buy their raw materials, to pay for labor, etc., while their goods are in process of manufacture or sale. The loan is liquidated from the proceeds of the sale.

In the same way a loan made to build a factory or to purchase machinery, especially if the concern has not been able out of its own increase in business to provide the needed capital assets, must be paid from the increased business resulting from the use of the new buildings or machinery. The liquidation of the loan also depends upon the market for the extra goods, and the ability of the concern to sell them. Often a long time intervenes between the making of the loan and its liquidation.

117. *Miscellaneous.*—Applications are made for loans for all kinds of purposes. One of the most frequent is what may be termed a "refunding" loan, in bonding transactions. A concern owes money, the debt is nearly due, the creditor is pressing for payment. The concern has no free banking resources, and so applies to the bank for a loan. This is one of the most unsatisfac-

tory loans that can be made. If the concern is unable to pay its creditors, and must borrow in order to do so, it is reasonable to suppose that it will experience a similar difficulty in paying the loan at maturity. The banker is usually loath to become a party to such a credit transaction.

Applications are made for loans to pay interest on mortgage indebtedness. In cases of this kind, it is possible that the embarrassment of the mortgagor will be temporary, and that a little help to tide over current demands will put him on his feet. Such applications, however, should receive careful investigation. The author once made an investigation which disclosed the fact that the prospective borrower, reputed to be well-to-do, had mortgaged his property to pay the taxes. The property was unproductive and the taxes heavy. The only way out of the situation was for the applicant to sell a portion of his unproductive property, and to wipe out the taxes from the proceeds.

Applications are made for loans to pay for customs due, in order that the goods in bond may be released and sold. Such loans may be liquidated in a short time. It should be ascertained, however, that the facts are as stated, and that the concern making the application is responsible.

Contractors and others are continually in the market for loans to pay labor. In some cases the account is a fair risk; in others, there is grave danger. A contractor sometimes makes a poor calculation on the amount of labor required to complete a certain piece of work, thereby reducing his profit to a minimum or losing it entirely. Each application for such a loan should be investigated carefully and judged on its merits.

There have been many applications for loans to pay

for automobiles. A more foolish application could not be made to a bank, unless perhaps it might be to finance a deal in fireworks. With the exception of motor trucks or delivery wagons for use in business, an automobile is a luxury that one should not enjoy unless he is able to pay for it without borrowing. No man should ask the assistance of his banker in a proposition of this kind.

If a man owns stocks, bonds or other securities which he can hypothecate for a loan to purchase an automobile, that is a different matter. The bank is then making a loan on the stocks and bonds and not on the security of the automobile.

Applications are sometimes made for assistance in financing amusement enterprises. "The American public likes to be humbugged," said P. T. Barnum; and the man who can fool the public the most and the longest is the man who is most successful in certain classes of amusement enterprises. The public is fickle, however, in this respect. One cannot tell beforehand whether the enterprise in question will prove successful or not. On the other hand, men engaged in amusement business usually pay off their debts in full before figuring profits. If the proprietor is a man of good character, and has valuable property which may be used in other businesses, advances may be made in moderate amounts, to assist in preparing for the season's business.

118. *Applying for a loan.*—A bank's profits are made by lending the money deposited by its customers. In the national banks of the country, the volume of loans is always nearly equal to the amount of deposits. At the close of business on August 9, 1913, the total deposit liability of all of the national banks of the country was $5,761,338,731.77; the total of loans and discounts was $6,185,555,525.30. Therefore, if a man is in need of

money and can show a bank that there is reasonable certainty that the money loaned to him will be paid back at maturity, he will have no difficulty in securing the credit he wishes.

119. *Refusal of applications.*—Loans, however, are not always granted, much to the discomfiture of the applicant, who usually imagines that the bank is discriminating against him unfairly. It happens at times that a bank is advertised to better advantage by its refusal of an application than by any other method that can be devised.

A stockholder of a certain bank applied for a loan of $1,000. He was not worthy of credit for any amount, and if the loan had been granted, it would have proved a total loss. The loan was promptly declined. The applicant left the bank and began publishing a story that the bank was not serving the community, that it was "no good" because it would not grant him a loan. In less than thirty minutes from the time he left the cashier's desk, another stockholder and depositor came in to see the cashier, and congratulated him on refusing the loan. He stated that if this particular application had been granted, he would have withdrawn his balance and sold his stock. As the bank was new, this one withdrawal and sale of stock would probably have injured it seriously. The result of this particular refusal was worth hundreds of dollars to the bank. It gave the community confidence in the management.

120. *Making a statement.*—A properly prepared statement creates a good impression. Sometimes a statement creates too good an impression, an impression that is false. There have been cases where two sets of books have been kept, one for the eyes of those who might wish to verify the statements furnished, and the other

for practical use in the business. The statements furnished were designed to create a good impression, but they were not true statements. On the other hand, true statements, showing that proper care has been taken to provide for expenses accrued, even though not due, that proper and ample reserve for depreciation has been set up, and the like, always create a good impression, because they are true.

An amusing incident is told of a storekeeper who applied for a loan, but who did not understand how to prepare a statement of his affairs nor why the bank officer asked so many questions. The bank officer wished to assure himself that the man had assets of real value, and therefore called at the store. Among other questions, the officer asked, "How much of this stock do you own, Mr. Stiggles?" "Oh," said the storekeeper, "is that what you have been trying to find out? Well, now," as he paced along in front of the shelves, "I owe Libby, McNiel & Libby $50 for that canned stuff, I owe the National Biscuit Company $40 for that stuff, I owe Bill Jones $160 for the last supply of sugar, flour and coffee, and the rest is all mine."

If an officer is shrewd enough to pick up the odds and ends, such as other assets and liabilities, the amount of money due, including taxes, etc., he will know more about the man's net worth than the man himself.

The value of a good accounting system in dealing with one's bank cannot be over-estimated. One of the first requisites for a good business man is that he have a thorough knowledge of his own business.

121. *Knowledge of one's business.*—A business man should approach the question of borrowing from his bank in the same way that he approaches any other business problem. When he buys $100,000 worth of

raw materials, he knows that he will be able to store them until needed, that his men and machinery will be able to work them up properly, and that his salesmen will be able to dispose of the finished product at a profitable figure. He investigates the entire matter before placing his order.

When he goes to his banker for a loan, he should be just as well informed regarding his financial standing and should be able to state his case clearly and simply. He should never, except under rare emergencies, rush to the bank for a loan in a hurry. There are many things for a banker to consider before deciding whether or not to make the loan and he should be given ample time. Of course, occasions arise when a business man is "caught," when he simply must have the money at once. At such a time he may be reasonably certain of receiving the loan without delay, if he has had the foresight to build up a credit standing at the bank. Otherwise he cannot reasonably expect it.

122. *Officers' duties, country bank.*—As a rule, the president is charged with the granting of loans, except in a very large bank, where the work is divided among the other officers. In this connection it may be well to state the duties of the different officers.

In a country bank, the president is usually a man of means in the community. He devotes to the bank only so much of his time as will enable him to pass upon the large loans and investments. He is usually able to surround himself with a coterie of men who act as directors and assist him in his work by giving counsel and advice. He acts as chairman of the board of directors. Unless he devotes a considerable portion of his time to the bank, he generally serves without salary.

The vice-presidency is usually an honorary position.

The man holding it takes the place of the president when he is not able to attend the meetings of the board. If the president is out of town or is incapacitated in any way for any length of time, the vice-president assumes the president's entire duties during his absence or incapacity.

The cashier is the executive head of the institution. He acts as secretary to the board and sees that the affairs of the bank are managed in accordance with the law. Frequently he acts as a director, in which case he serves on the loan committee. He must have a detailed knowledge of the methods used in managing the institution, and must be able to assist in any part of the work or to take active charge of the whole.

123. *Officers' duties, city bank.*—In a large city bank the duties of the officers are more sharply defined. The volume of business makes it necessary that each branch be placed in charge of an officer who devotes his entire time and attention to it. Much more efficient work is accomplished by this method than is possible where each officer assumes every kind of work. The president keeps in touch with market conditions and with the best bankers in the community. He devotes his entire time to the bank and approves every investment. In the smaller city banks he approves every loan made, with the exception of purely call loans on securities with ample margin to protect the bank in case of a declining market. Loans of this class are made from day to day for the purpose of keeping the extra funds invested. They may safely be entrusted to an under officer if the president has not the time to attend to them himself. Often the vice-presidents share the responsibility of the loaning and investing with the president.

In some of the very large banks, the business of loaning and investing is so heavy that one vice-president makes a specialty of a certain class of loans, while another assumes entire charge of another class, and so on. In this way each officer becomes a specialist and the work is handled in the most efficient manner possible. When a bank deals in securities, the work of buying and selling bonds frequently falls to the lot of one of the vice-presidents, especially if he is in closer touch with market and economic conditions than is the president.

Some vice-presidents devote their entire time to the advertising and to planning for new business. They depend upon the efficient management of the bank to hold the business after they have obtained it. The means employed to secure deposits are numerous. In some banks the securing of new business is assigned to an assistant cashier.

The cashier of a large bank is the executive officer. In addition to acting as secretary to the board of directors, he has personal supervision of the stock ledger and stock certificate book, making the transfers and entries himself when the stock is inactive. He receives a copy of the daily statement from the general bookkeeper, and sees that the reserve is kept up to the required standard. With the aid of his assistants, he signs all checks for the disbursement of the bank's funds and all certificates of deposit. They initial all expense items, no matter how small, for which cash is to be paid. He has direct charge of the clerical staff, placing the men to the best advantage, and employing such new clerks as may be necessary.

Where assistant cashiers are employed, much of the work of the cashier is divided among the assistants.

One may be given direct supervision of the loan department, another of the transit department, another of the bookkeeping and auditing work. The cashier and his assistants answer all questions regarding the practical work of the bank, and give official sanction to all unusual transactions arising in the daily routine.

124. *Secretary and treasurer, trust company.*—In a trust company, the duties of a cashier are about equally divided between the secretary and the treasurer, with this distinction, that to the secretary is more specifically assigned the trust business, while the treasurer is responsible for the banking department. The secretary ranks a little higher than the treasurer, since he acts as secretary to the board. Frequently, however, the two offices are combined.

125. *Chief clerk.*—Two important men whom the customers of a bank rarely meet are the chief clerk and the auditor. The chief clerk is responsible to the cashier for the successful management of the clerical staff. He shifts the clerks from one department to another, as occasion requires, consulting the cashier before making any important changes. He sees that each department has enough men to finish the work within reasonable hours and that the men are kept busy. He employs all clerks and sees that the messengers serve each department efficiently, that the proper amount of stationery is purchased and accounted for, and, in general, relieves the cashier of all duties in connection with the clerical staff and routine work of the bank.

126. *Auditor.*—The office of auditor is becoming increasingly important. The work is of much more value in a trust company than in a bank, or perhaps it would be more correct to say that it is better appreciated in a trust company than in a bank. The complicated work

connected with the various departments of the trust company have compelled them to create this office. The auditor must be well versed in accounting procedure and should be in complete control of the accounting methods, with power to add, change, or substitute such books, forms, or memoranda records as he considers necessary to make the affairs of the institution clear to the officers and directors. He prepares all statements required by the officers and directors, and certifies as to their correctness. He makes frequent audits of all of the departments, and performs such other duties as come within the scope of this office.

CHAPTER XI

ESTABLISHING BANK CREDIT (*Continued*)

127. *Credit department.*—The credit department in any bank is an evolution. It grows as the bank grows. In a small country bank, the president does not keep any record of the worth of his borrowers. It is not necessary, since he and the other members of the board of directors are intimately acquainted with everyone who does business with the bank. If statements of condition are taken, they are seldom analyzed. As the bank grows, however, comparative records of a man's financial responsibility become absolutely necessary. Then statements of condition are required and analyzed, and are made the basis of further investigation.

When a concern seeks to open borrowing relations with a large city bank, its officers are asked to prepare a statement, usually in the form shown in Figure 12, if the applicant represents a corporation, or Figure 13, if he represents a firm. These forms were prepared by a committee of the American Bankers Association after mature deliberation. The forms are often modified to meet local conditions. The statement may be, and usually is, handed to an officer, who gives it a cursory examination, and turns it over to the credit department for analysis, additional investigation and report.

128. *Credit analysis rules.*—Invariably a borrower seeks to show a solvent liquid condition when making a statement to a bank. To do so, he should make the statement at a time when liabilities are lowest. The

FIGURE 12.

STATEMENT OF CORPORATION.

CORPORATION

FOR THE PURPOSE OF PROCURING CREDIT FROM TIME TO TIME WITH YOU FOR OUR NEGOTIABLE PAPER OR OTHERWISE, WE FURNISH THE FOLLOWING AS A TRUE AND ACCURATE STATEMENT OF OUR FINANCIAL CONDITION ON Dec. 31st 1923. WE AGREE TO AND WILL NOTIFY YOU IMMEDIATELY IN WRITING OF ANY MATERIALLY UNFAVORABLE CHANGE IN OUR FINANCIAL CONDITION, AND IN THE ABSENCE OF SUCH NOTICE OR OF A NEW AND FULL WRITTEN STATEMENT, THIS MAY BE CONSIDERED AS A CONTINUING STATEMENT AND SUBSTANTIALLY CORRECT; AND IT IS HEREBY EXPRESSLY AGREED THAT UPON APPLICATION FOR FURTHER CREDIT, THIS STATEMENT SHALL HAVE THE SAME FORCE AND EFFECT AS IF DELIVERED AS AN ORIGINAL STATEMENT OF OUR FINANCIAL CONDITION AT THE TIME SUCH FURTHER CREDIT IS REQUESTED.

ASSETS		LIABILITIES	
CASH	5421 16	NOTES PAYABLE	55000
BILLS RECEIVABLE (NET)	9619 40	ACCOUNTS PAYABLE	11216 41
ACCOUNTS RECEIVABLE (NET)	9424 03	DEPOSITS	7306 03
MERCHANDISE	6399 19	BONDED DEBT	
LAND	10000	MORTGAGES	15000
BUILDINGS	32400	ACCRUED LIABILITIES	1619 24
MACHINERY—FIXTURES	7192 03	TOTAL	90141 68
		CAPITAL	150000
		SURPLUS—PROFITS	28901 14
		RESERVES	12509 99
TOTAL	281548 81	TOTAL	281548 81

CONTINGENT LIABILITIES. ON BILLS RECEIVABLE DISCOUNTED 7561.25 OTHER none

CASH. ON HAND AND IN BANK, $ _____ NAMES OF BANKS First National

BILLS RECEIVABLE. ANY OVERDUE OR DOUBTFUL? No ANY FROM OFFICERS, DIRECTORS, SUB-COMPANIES OR SIMILAR SOURCES? No

ACCOUNTS RECEIVABLE. STATE AMOUNT DOUBTFUL, NOT FROM CUSTOMERS OR IN ANY WAY NOT REALIZABLE WITHIN IMMEDIATE FUTURE none

MERCHANDISE. FINISHED 15910 20 UNFINISHED 45306 00 RAW 4663 39 VALUED AT COST OR MARKET? cost IS ALL SALABLE? yes

LAND. DESCRIBE BRIEFLY Plant—four acres ASSESSED VALUE 9000 MARKET VALUE 16,000

BUILDINGS. COST $ 50,000. AGE 12 years DEPRECIATION 5%

MACHINERY AND FIXTURES. COST $ 110,000 DEPRECIATION 10% CONDITION Kept up fully

SAMPLE FORM

OTHER ASSETS.

ARE ANY OF ASSETS UNAVAILABLE FOR PAYING DEBTS? no LOSSES 2100

INSURANCE. STATE KIND AND AMOUNT 160,000 fire

NOTES PAYABLE. TO OWN BANKS 25.000 THROUGH BROKERS 30.000. OTHERWISE none

ACCOUNTS PAYABLE. TERMS OF PURCHASE? 2/10/60 DO YOU DISCOUNT AND ANTICIPATE? discount

DEPOSITS. TIME OR DEMAND? time FROM WHOM? relatives INTEREST 5%

BONDED DEBT AND MORTGAGES. DUE? 1920 RATE 5% ON WHAT ASSETS A LIEN? plant

ACCRUED LIABILITIES. ITEMIZE labor and taxes

CAPITAL. PREFERRED AUTHORIZED $50.000 ISSUED $50.000 DIVIDENDS 7% COMMON AUTHORIZED $200.000 ISSUED $100.000 DIVIDENDS 8%

RESERVES. ITEMIZE Merchandise 9310.25- Accounts receivable 3195.74

NET SALES

LAST FISCAL YEAR		538610 30
COST OF SALES		493.850.60
GROSS PROFIT		44759.70
INTEREST, TAXES, DEPRECIATION, ETC.	15.692 25	
DIVIDENDS PAID	11.500 00	
SURPLUS FOR YEAR		17.567.45

HAVE THE BOOKS BEEN AUDITED BY A CERTIFIED PUBLIC ACCOUNTANT? yes IF SO, GIVE NAME OF FIRM AND DATE OF AUDIT A B Audit Co 12/31/

CORPORATE NAME City Manufacturing Company

DATE SIGNED February 3. 1914 BY G. T. Brown President (STATE OFFICER'S TITLE)

OFFICE ADDRESS 200 Broadway NATURE OF BUSINESS Manufacturers of Hardware

LOCATION OF PLANTS AND BRANCH OFFICES

OFFICERS	DIRECTORS
PRESIDENT	
VICE-PRESIDENT	
TREASURER	
SECRETARY	

SAMPLE

FIGURE 12.

STATEMENT OF CORPORATION.

character of the business determines the character of a good statement. Furs and raw silks, for example, are sold on six to ten months' note, woolen goods on sixty to ninety days' open account. Now, if a credit man should find a large amount of bills receivable in a statement of a raw silk or fur concern, he would not raise a question, but if he should find the same condition in the statement of a woolen manufacturer, or in the statement of a department store, which should sell for cash or on monthly accounts, he would understand that the notes represented slow and possibly bad accounts.

As a general rule, each item in the statement should bear the proper ratio to annual sales. Merchandise should be in the proportion of one to five or one to three of the amount of annual sales. Accounts receivable should be about one-sixth of the sales, where the terms are sixty days; in a department store they should be about one-tenth to one-twelfth of the sales; and in a woolen business, one-third of the sales on four months' time. The ratios differ in other businesses between sales and the various accounts referred to. Where purchases are made on sixty days, accounts and bills payable should equal about one-sixth of sales; where they are made on six months terms, one-third to one-half of the sales.

If the statement is taken at the season when the borrower's assets are in the most liquid condition, the amount of quick assets should be about twice as large as the amount of current liabilities. A smaller proportion would indicate that the business is in danger of over-expansion or embarrassment during the heavy season.

In a manufacturing business the total volume of sales should be about one to three times the amount of cap-

ital; in a jobbing business, four to five times the capital; and in a raw product or brokerage business, from five to twenty times the capital.

A good manufacturer's statement should show a cash balance of about twenty per cent of the notes discounted at the concern's own bank, in order to maintain good bank credit.

129. *Good statement analyzed.*—Figure 12 shows all the points a good statement should possess. It sets forth the points that credit men seek in endeavoring to find out all there is to be known about a man's business. The indebtedness to the company's own bank is given as $25,000, and the cash balance as $5,421.16. This is 21.7 per cent of the amount borrowed, which means that the borrowing account is satisfactory to the bank. Bills receivable amounting to $3,619.40 are small in comparison with accounts receivable, $94,248.03, showing that few customers close their accounts by note instead of cash. Accounts receivable represent about one-fifth of the annual sales, $538,610.30, which indicates that the average customer pays his account in about sixty days' time. Merchandise, $63,934.19, is about one-eighth the sales, proving that the goods move rapidly and that there is little dead stock on hand.

Plant, including land, buildings, machinery and fixtures, are less than one-half of the total assets, showing that the difference is not hampered by too large a fixed investment, and that there is no lack of working capital. The net quick capital is about $93,000. The ratio of quick assets to current liabilities is 2.3 to 1, showing that the business is not over-extended. The accounts receivable and cash will more than pay current debts, which fact points to a liquid condition.

A comparison of bills payable, $55,000, with accounts

FIRM

FOR THE PURPOSE OF PROCURING CREDIT FROM TIME TO TIME WITH YOU FOR OUR NEGOTIABLE PAPER OR OTHERWISE, WE FURNISH THE FOLLOWING AS A TRUE AND ACCURATE STATEMENT OF OUR FINANCIAL CONDITION ON Dec. 31st 1913 WE AGREE TO AND WILL NOTIFY YOU IMMEDIATELY IN WRITING OF ANY MATERIALLY UNFAVORABLE CHANGE IN OUR FINANCIAL CONDITION, AND IN THE ABSENCE OF SUCH NOTICE OR OF A NEW AND FULL WRITTEN STATEMENT, THIS MAY BE CONSIDERED AS A CONTINUING STATEMENT AND SUBSTANTIALLY CORRECT; AND IT IS HEREBY EXPRESSLY AGREED THAT UPON APPLICATION FOR FURTHER CREDIT, THIS STATEMENT SHALL HAVE THE SAME FORCE AND EFFECT AS IF DELIVERED AS AN ORIGINAL STATEMENT OF OUR FINANCIAL CONDITION AT THE TIME SUCH FURTHER CREDIT IS REQUESTED.

ASSETS		LIABILITIES	
CASH	510 60	NOTES PAYABLE	22 171 49
BILLS RECEIVABLE (NET)	42 694 06	ACCOUNTS PAYABLE	175 361 37
ACCOUNTS RECEIVABLE (NET)	109 403 6	DEPOSITS	15 24 37
MERCHANDISE	130 662 41	MORTGAGES	5000
LAND	25 000	ACCRUED LIABILITIES	21 619 47
BUILDINGS	134 736 24		
MACHINERY—FIXTURES	148 619 46		
		TOTAL	225 676 60
		NET WORTH	258 941 12
		RESERVES	8 545 41
TOTAL	493 163 13	TOTAL	493 163 13

CONTINGENT LIABILITIES. ON BILLS RECEIVABLE DISCOUNTED 137 619.20 OTHER none

CASH. ON HAND AND IN BANK, $ NAMES OF BANKS First National

BILLS RECEIVABLE. ANY OVERDUE OR DOUBTFUL? 3079.70 ALL FROM MEMBERS OF FIRM OR SIMILAR SOURCES? 3619.20

ACCOUNTS RECEIVABLE. STATE AMOUNT DOUBTFUL, NOT FROM CUSTOMERS OR IN ANY WAY NOT REALIZABLE WITHIN IMMEDIATE FUTURE 1516.45

MERCHANDISE. FINISHED 102.650. UNFINISHED 9643.20 RAW 18369. VALUED AT COST OR MARKET? cost IS ALL SALABLE? yes

LAND. DESCRIBE BRIEFLY plant—three acres ASSESSED VALUE 10000. MARKET VALUE 25000

BUILDINGS. COST $ 140.000 AGE 10 years DEPRECIATION none

MACHINERY AND FIXTURES. COST $ 160.000. DEPRECIATION 11400 CONDITION fair

SAMPLE FORM

FIGURE 13.

STATEMENT OF FIRM.

FIGURE 13.

STATEMENT OF FIRM.

OTHER ASSETS.

ARE ANY OF ASSETS UNAVAILABLE FOR PAYING DEBTS? no LOSSES 6.310.

INSURANCE. STATE KIND AND AMOUNT. 70.000 fire

NOTES PAYABLE. TO OWN BANKS 10.000. THROUGH BROKERS none OTHERWISE 12.171.49

ACCOUNTS PAYABLE. TERMS OF PURCHASE? 7/30 - four months DO YOU DISCOUNT AND ANTICIPATE? no

DEPOSITS. TIME OR DEMAND? demand FROM WHOM? relatives INTEREST 6%

MORTGAGES. DUE? 1918 RATE 5% ON WHAT ASSETS A LIEN? plant

ACCRUED LIABILITIES. ITEMIZE { Chattel Mortgage on Machinery and Merchandise

NET WORTH

GENERAL PARTNERS			SPECIAL PARTNERS		
NAME	AMOUNT CONTRIBUTED	OUTSIDE NET WORTH	NAME	AMOUNT CONTRIBUTED	UNTIL
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—

DATE OF PARTNERSHIP? — DATE OF EXPIRATION?

IS THE FIRM, OR ANY MEMBER THEREOF, CONNECTED WITH ANY OTHER LINES OF BUSINESS? Members own mining company

RESERVES. ITEMIZE General reserve

NET SALES.

LAST FISCAL YEAR		373.520 70
COST OF SALES		350.270.25
GROSS PROFIT		23.250.45
INTEREST, TAXES, DEPRECIATION, ETC.	29.730.95	53.274.15
WITHDRAWALS BY PARTNERS	23.543.20	
Loss / GAIN FOR YEAR		30.023.70

HAVE THE BOOKS BEEN AUDITED BY A CERTIFIED PUBLIC ACCOUNTANT? no IF SO, GIVE NAME OF FIRM AND DATE OF AUDIT

ADDRESS AND DATE Ft. February 3 1914 FIRM NAME Brown and Black

BY A B Brown.
(MEMBER OF FIRM)

payable, $11,216.41, indicates a good financial credit and that accounts payable are discounted. The balance not paid represents merely one week's accrual.

The mortgage debt is small and covers the plant only, leaving all quick assets free as a basis for bank and merchandise credit.

The contingent liability, $7,561.25, is small.

Analysis of merchandise shows finished goods, $15,910.20; unfinished, $4,530.60; raw materials, $42,493.39. The proportion of finished goods is small, which is very desirable, because, while changes in styles may affect finished goods, and, to a greater extent, those in process, raw materials are available for use, even with changed styles. This condition of the merchandise account shows also that finished goods are shipped promptly when completed and that the shelves contain no dead stock.

The statement shows that proper deduction is charged against buildings, machinery and fixtures, and that these charges have been kept up. Insurance amounting to $160,000 covers buildings, machinery and merchandise.

Analysis of bills payable indicates good credit in the open market, since there are $30,000 outstanding at the time of the statement. This amount, together with the amount owing to the concern's own bank, makes up the entire amount of notes payable, indicating that no notes are given to close merchandise purchases.

Money on deposit with the concern, usually employés' savings funds, is not a demand liability, so there is no need for giving special consideration to this amount. Accrued liabilities, $1,619.24, are small, and must be considered, therefore, as proper in amount and

purpose. The reserves for depreciation on merchandise, $9,310.25, and on accounts receivable, $3,195.74, are ample.

Sales, $538,610.30, are as large as is consistent with safety. The quick capital employed in the business, amounting to about $90,000, has been turned over about six times during the year; the entire capital assets, three and a half times. Profit and loss, $44,759.70, indicates that proper cost accounts have been maintained and that the sales expenses are moderate. After sufficient amounts for insurance, taxes, depreciation and dividends have been deducted from gross profits, there is still $17,567.45 to be carried to surplus.

130. *Bad statement analyzed.*—The statement shown in Figure 13 illustrates the dangerous features in credit risks. Any one of these features is sufficient to warn the credit man. Some of them would cause him to recommend that the application for a loan be declined.

The first thing that strikes one is that the cash is entirely too small to operate the business with safety and far too low to warrant bankers in continuing to extend credit. They owe $10,000 on their own paper, and $132,619.20 on indorsed bills receivable. The cash should be at least $25,000, instead of $510.60.

Bills receivable, $42,694.06, is much too large, and accounts receivable, $10,940.36, too small. This shows that a great many accounts are closed by note instead of cash. Many of these notes were accepted, probably, as a last resort, and are, practically, a complete loss. This opinion is confirmed by the facts that bills receivable, $30,294.70, are overdue or doubtful, and that $3,619.20 are due from members of the firm or similar sources. The latter amount could never be realized upon and, therefore, is no asset. In addition, accounts

receivable amounting to $1,516.45 are reported as slow. Merchandise, $130,662.41, is too large in proportion to total sales, $373,520.70, being turned over less than three times a year. Further analysis of the merchandise shows that nearly all this stock is finished or in process, and, therefore, subject to changes in style.

The amount invested in land, buildings, machinery and fixtures, aggregating $308,355.70, is entirely out of proportion to the amount of capital, $258,941.12. This disproportionate plant investment indicates that the concern is operating with an excessive current debt. Undoubtedly this strained condition has made it impossible to place a larger mortgage on the plant than $5,000 and has necessitated a chattel mortgage covering merchandise and machinery, thus making a lien on the principal quick assets, prior to any open accounts. At the minimum period, when a statement is prepared, the amount of liabilities should not be more than half the amount of quick assets. In this case the current liabilities exceed the quick assets by $14,000.

The small amount of notes payable, compared with accounts payable, shows that money credit is poor, and that a period of four months and more is taken on accounts. Accounts payable are about one-half of the total year's purchases. Contingent liability is very heavy and shows the general condition of the business. It also indicates that the banks demand indorsement on the concern's paper.

The depreciation charge against machinery is not enough for ten years. Buildings are not credited with any reduction whatever. Losses on bad debts are about two per cent; the normal amount is one-half to one-third of one per cent.

Only $70,000 fire insurance is carried against the plant and merchandise valued at over $413,000.

Analysis of bills payable shows that $12,000 has been given to creditors, probably to close overdue merchandise accounts.

The members of the firm have outside interests of a speculative nature, which is a dangerous thing for the business. The heavy drawings by the partners confirm this fact.

Total sales amount to about one and one-half times the net worth. This is due probably to lack of working capital. The cost of manufacture does not leave the proper margin of profit. The same condition makes it necessary to pay high rates of interest. Finally, the loss of twelve per cent on capital during the year shows the general result of all the above causes and tends to endanger the business further. A poorer credit risk can hardly be conceived.

131. *Information from bank's records.*—The records of the borrower's account with the bank furnish much information of which the average business man is not aware. For example, the average balance indicates the general trend of the depositor's business. Then, again, much information may be derived from a record kept by the receiving teller of the items deposited by the borrower for a given length of time, the names of the makers of the checks, and the places where they are payable. Frequently the credit man can obtain valuable information by calling for the paid vouchers and noting the names of the people to whom they are issued. As a rule, when a borrower applies for a loan he gives as references a list of picked concerns, the concerns he has paid most promptly, but omits those whom he knows will not speak favorably of him. The credit

man, however, by running over the paid vouchers, can find out the names of others to whom he may write for further information. The overdraft record also enters into the analysis of a depositor's account.

The analysis of a borrower's affairs along the lines indicated gives the credit man a clear insight into the condition of the borrower. When these analyses are compared year with year, still further information is disclosed. Banks that have efficient credit departments call for statements at frequent intervals and make direct comparisons of them. The value of such comparative credit records is apparent.

132. *Dun's and Bradstreet's.*—As a rule, banks call upon Dun's and Bradstreet's for special reports and make careful note of the ratings given the borrower by these concerns. A loan would hardly be granted on the strength of an agency rating or report. Nevertheless, such reports reveal certain facts which are of value to the credit man.

133. *Trade relations.*—The credit department also investigates the borrower's trade relations, as inferred in the foregoing. If a prospective borrower has done business with men in the city where the bank is located, the credit man calls upon the credit men connected with these concerns, and as a rule secures helpful information. Of course, he always holds himself ready to reciprocate the favor when he is in a position to do so. When necessary, he secures credit information from out-of-town concerns by writing to them. The replies to these letters are not always so illuminating as they might be, because of the fear on the part of the concerns that their names will be used, even though they write in strict confidence. The wording of the letters

is usually very guarded, but the capable credit man is able to read between the lines.

134. *Credit man's report.*—After the credit man has gathered all his information, he makes a report to the officers, and recommends the acceptance or refusal of the application. His report carries much weight in any further discussion by the officers or the members of the executive committee on the application in hand.

The reports made by the credit department are usually accompanied by the complete data secured by the credit department, so that if the officers wish they may refer to the original documents and form their own opinion as to whether or not the credit man has drawn the correct conclusion.

After the final determination of the executive committee or the officer in charge of the loans, the papers are returned to the credit department, where they are filed for future reference. The papers are put into envelopes of suitable size and filed in alphabetical order. After a file has once been started, all matters of credit importance are put into the envelope or folder, together with such memoranda as may be necessary. Newspaper clippings referring to the borrower and any matters of importance that come to the attention of the officer or credit man are noted and filed.

In addition to the credit files, the credit department keeps several condensed records on cards of convenient size. Figures 14 and 15 show two forms for average balance and discount records. The cards shown in Figure 16 illustrate how general information, which is found on the statements and filed with the other matter, may be condensed for ready reference.

135. *Value and care of credit.*—A man who has once established credit with a bank should appreciate its value.

OPENED BY

WITH $ RATE

PROPOSED $

	19		19		19		19		19		
	MIN	AVERAGE	MIN.	AVERAGE	MIN	AVERAGE	MIN	AVERAGE	MIN	AVERAGE	
JAN.											JAN.
FEB.											FEB.
MAR.											MAR.
APR.											APR.
MAY											MAY
JUNE											JUNE
JULY											JULY
AUG.											AUG.
SEPT.											SEPT.
OCT.											OCT
NOV.											NOV.
DEC.											DEC.

FIGURE 14.

AVERAGE BALANCE CARD.

	Av. Bal.	L & D 31st	Av Bal	L & D 31st	Av Bal	L & D 31st	Av Bal	L & D 31st	Av Bal.	L & D 31st
Jan.										
Feb.										
Mar.										
Apr.										
May										
June										
July										
Aug.										
Sep.										
Oct.										
Nov.										
Dec.										
Yearly Av.										

FIGURE 15.

AVERAGE BALANCE AND DISCOUNT CARD.

Credits and statements

Name					Liquidating Date		
Location				Business			
Officers and Partners							
Guarantors				Last Statement			
Average Balance	1909	1910	1911	1912	1913	1914	1915
Maximum Loan							
Assets							
Liabilities							
Net Worth							
Excess Quick Assets							
Line Direct							
Line Commercial							

FIGURE 16
CREDIT AND STATEMENT CARD

He should realize that his credit standing is a part of the character of his business, something that may stand him in very good stead in times of stress. There are certain unforgivable sins in banking, which a depositor should never commit, if he would keep his credit standing good. The four most important of these are: (1) kiting, (2) not taking care of one's paper when due, (3) overdrawing one's account, and (4) drawing against uncollected funds. They are of importance in the order given.

136. *Kiting.*—It is surprising how many business men permit themselves to be drawn into that foolish expedient, kiting. It is the most self-evident attempt to bolster up an account that has ever been made, and when once made is never forgotten. The officers, and all clerks who have to do with the account keeping, are warned by the circumstance itself to keep on the lookout for further trouble.

Kiting consists in drawing checks between allied concerns, especially between those in different cities. Figuratively speaking, the kite always gets caught in the bookkeeping wires at both banks. No account can draw heavily against uncollected funds without calling the bookkeeper's attention to the fact. His first impulse is to analyze the deposit against which the check is drawn, and invariably he finds a check drawn on the bank in which the item he is holding in his hands was deposited. There are many banks in the country which will immediately ask a kiting depositor to withdraw his account, and will not even give him a chance to explain the matter. Some concerns try to cover a kite by taking three concerns at different places into the transaction. This is a little harder to detect, but it is just as sure to be found out as the simplest one. Every draft

against uncollected funds must meet the eye of the bookkeeper who has all the information at hand to detect the danger.

137. *Overdue paper.*—It is careless, to say the least, to allow one's note to become due without giving it attention. Such an act of carelessness leaves a bad impression upon those who can judge a borrower only by his acts. Past due paper enters into a special file and is presented to the discount clerk and officer every day until the matter is adjusted. If the borrower once forgets to give attention to his loans on or before the proper date, a black mark is registered, which is almost as indelible as the record of the kite.

138. *Overdrawing.*—Overdrawing one's account has been referred to already. No man can afford to take this chance with his bank.

139. *Uncollected funds.*—Drawing against uncollected funds is equally bad. It should be remembered by every depositor that the only kind of deposit he can make, that the bank can put to immediate use, is cash. Clearing house checks must pass through the clearing house. Checks drawn on out-of-town points must be sent there for payment and returns. Sometimes these returns are made by drafts on clearing house banks, and these must be sent through the clearing house before the bank in which the item was deposited is actually in possession of the funds represented by the checks. Many business men think that if it takes two days to go to a certain city, a check on that place should be paid and in the bank's hands within four days. He does not realize that under our system of independent banks, each one must make arrangements for the most advantageous collection of out-of-town items and that, sometimes, even with the best of arrangements, it might take

five days to collect an item payable at a town that can be reached in two days. The item must be received and passed through the books of the bank to which it is sent. The depositor should give the bank plenty of time to collect all items before issuing checks against the deposits. It is the only safe way. The bookkeepers are charged with the responsibility of referring to the officers all checks that are drawn against uncollected funds, a fact that the depositor would do well to bear in mind.

140. *Inquiries at the bank.*—Bank credit, especially in a community of moderate size, where every man is acquainted with his neighbor, is a valuable thing for a business man. Banks are requested frequently to give information regarding the credit standing of their depositors. While they carefully guard against giving details concerning a man's business, they must, of course, give some answer to the inquiries made. The value of one's account with the bank, the nature and methods of doing business, and the general standing of the man in the community, all have an influence on the banker's estimate. Even a small account, if well handled, is well spoken of by the banker. When a depositor files a statement, the banker is always in a position to give information based on facts, if he has made a complete investigation of the borrower's credit standing.

No man can prevent his creditors from asking questions about him, nor can he prevent his banker from telling what he knows. Suppose a business man to go to his banker and say: "Of course, you are called upon from time to time to answer inquiries regarding your depositors, and I know that you are careful not to divulge confidential information, but I wish that hereafter you would refuse to give any information or express any opinion whatever regarding me." Then

suppose that a creditor of this business man follows him to the cashier's desk and makes a direct inquiry to which the banker should reply, "Well, Mr. Credit Man, I would like to oblige you by giving you the information, but I have been instructed by Mr. —— to say nothing regarding him or his credit standing. If you will ask me about any other of our depositors, I shall be pleased to help you all I can." The credit man would insist on finding out what the banker knew about the credit standing of the merchant, and if he failed, would report to his house and instruct them not to ship any more goods to Mr. Merchant until he had an opportunity to make further investigation.

One's credit standing at the bank should be guarded with care. Misunderstandings, however insignificant, should not be allowed to open a breach between the banker and the depositor, for the changing of an account hurts the depositor as much as it does the banker.

CHAPTER XII

DEPOSITORS' ACCOUNTS

141. *Value of an account to the bank.*—Banks have in recent years been paying more attention to the cost of carrying accounts than they did formerly. They now insist that accounts be maintained on a profit-making basis. In the City of New York, some banks have gone so far as to set a minimum average balance to be maintained, and to charge a depositor when the balance falls below that figure. This interests the depositor of personal funds more than it does the depositor of business funds, because, as a rule, the minimum balance is set so low that it does not affect the business man even though the volume of his business is small, provided his account is carefully managed.

Some bankers deal with the problem in a general way. They hold that, since a bank receives its charter from the state, it is a public institution, and, therefore, should conduct its business as a lawyer or a doctor, taking every account that is offered, excepting those of depositors who would abuse the privilege, and making the good accounts offset those which carry only a small balance.

Other bankers believe that it is not the amount of balance maintained, but the amount of work that an account gives the bank, which determines whether or not it is profitable. They endeavor to find out the actual cost of carrying the accounts and to settle each

case on its merits. The number of bankers holding this view is yearly increasing.

Accounts differ in the amount of trouble they give and in their worth to the bank. An account maintaining a balance of $10,000 is worth ten times as much as the account that carries $1,000 balance, provided both make the same number of deposits of the same kind and draw the same number of checks. This, however, does not always hold true, for the small account may wield ten times as much influence as the large in connection with other accounts.

142. *Loanable balance.*—The balance left with the bank from day to day is the base from which all analyses of accounts are made. It must be remembered that the bank does not loan all the money left with it on deposit. It must set aside a portion of the depositor's money to pay such checks as may be presented. The amount varies in this country, but twenty per cent may be regarded as an average reserve.[1] The earning power of the depositor's balance is, therefore, reduced by that much. This allowance is made by deducting from the ledger balance an amount equal to the reserve.

A customer's deposit is available for loaning immediately if it is made in gold or lawful money. If checks are deposited, they must be presented at the place where they are payable and the money secured before the amount can be loaned. This sometimes requires several days, especially if the items are payable out of town.

[1] Economists and students of banking theory maintain that the loaning power of a bank is increased by each deposit made; that if the bank is required to maintain twenty-five per cent cash reserves it will be able to create new deposits by lending three times the amount of the cash deposit. If there were but one bank in the country this theory would work out in practice so long as none of the three borrowers wrote any checks for the amount credited to his account as a loan. With our system of 30,000 banks and because borrowers usually have immediate need for the money lent to them, the practical bank man may not take this theory into account in estimating the value of an account.

The amount that is left over after deducting the required reserve and the amount in process of collection, is the amount that is available for loaning purposes and upon which the bank may earn money.

143. *Fluctuating balances.*—Another phase of the situation should be considered at this point. With the exception of call loans, made to stock brokers on the New York Stock Exchange, there is no day-to-day market for money in this country. The bank must loan its deposits for different lengths of time, the longer the better so far as the rate is concerned. If, then, a depositor keeps a relatively large balance for a part of the month, and then suddenly draws out nearly all of it, the banker can loan only a part, that is, the minimum balance.

144. *Method of an analysis.*—The banker finds the total earning power of the depositor's loanable balance by multiplying it by the average rate earned on all investments. The details of finding this average rate need not be discussed here. To this he adds the exchange collected from the depositor, and any special fees. From the sum thus obtained he deducts the interest paid, credited or accrued on the ledger balance, which, by the way, is paid on the total balances, less amounts in process of collection. The cost of collecting the items is also figured and deducted. Some banks are now trying to find the cost of handling the accounts, including the overhead, the cost of stationery and supplies, rent, taxes, etc. When this is found, it, also, is deducted. The difference between the net earning power and the cost of handling the account is the amount that the account will earn. If, on making an analysis of this kind, the account shows a loss, the banker requests the depositor to leave more money on deposit, to give the

bank fewer out-of-town items to collect, or otherwise make the account more profitable.

145. *Ways a bank can help a depositor.*—A banker is compelled to make a study not only of local conditions, but of general affairs, in order that he may properly invest the funds entrusted to him. He is, therefore, in a better position than many business men realize to help them in matters pertaining to their business. In some sections of the country there is more local demand for money than the local depositors furnish. In this case the banker may not be well informed regarding securities, since he does not seek investments in them; but investment bankers in the large cities will gladly give him the benefit of the information they have in their files, and will personally attend to any inquiries he may make. In fact, the banker, no matter where he is situated, is in a position to secure any information regarding investments that may be obtained. Moreover, if the banker has co-operated with the depositor in the selection of his investments, he does not need to make a new study of them if they are presented to him as collateral for a loan.

Reference has been made to the demands upon the banker for credit information. This presents a possibility for the depositor. As his own business grows, more and more care must be exercised in selling the product. Application for extension of credit to one's customers should receive just as careful consideration as if the merchant were loaning money. Of course, no man should throw the whole responsibility of investigating the credit standing of his customer upon his banker, but there is no reason why he should not confer with him. He should not expect to receive any information that may be considered confidential, such as the

amount of a man's deposit account or the nature and extent of his borrowing, but he is at liberty to ask for general information that will be of help to him. There is an element of risk, however, to the banker in giving even this general information.

It must not be supposed that the banker is in a position to render all kinds of service to all men at all times, but there are many ways in which he can be of assistance to his depositors. Even though he may not know the ins and outs of the business of all his depositors, nevertheless he is more intimately informed concerning them than almost any other man in the community, and is, therefore, in a position to give advice. The man who contemplates entering a new business would do well to consult his banker with regard to the general standing of those engaged in it.

146. *Safe deposit boxes.*—The best advertisement for a commercial banking business is service rendered. In addition to the services enumerated, there is another—renting safe deposit boxes. The bank must have a fire- and burglar-proof vault of its own, and when building this essential equipment, it is comparatively inexpensive to add space for safe deposit boxes. These boxes are given the same protection as is afforded the cash and other assets of the bank. Each box renter is given a tin box which is locked in a special compartment to which only he or those he may appoint have access. These boxes rent from $3.00 per year up. As a rule, access may be had to them from 9 A.M. to 4 or 5 P.M. Valuable papers of all kinds are kept in them: stocks, bonds, fire insurance policies, etc. Some concerns have accounting records that are very valuable, and having no fireproof vaults of their own, keep duplicates of their records in safe deposit vaults for protection.

147. *Clearing house operations.*—The clearing house has been mentioned, especially in connection with the work of the receiving teller's department. The Supreme Court of the State of Pennsylvania has defined a clearing house as follows:

> It is an ingenious device to simplify and facilitate the work of the banks in reaching an adjustment and payment of the daily balances due to and from each other at one time and in one place each day. In practical operation it is a place where all the representatives of the banks in a given city meet, and, under the supervision of a competent committee or officer selected by the associated banks, settle their accounts with each other and make or receive payment of balances and so "clear" the transactions of the day for which settlement is made.

Mr. James G. Cannon, the best known authority on clearing houses in the United States, defines a clearing house as follows:

> A clearing house may be defined as a device to simplify and facilitate the daily exchanges of items and settlements of balances among the banks, and a medium for united action upon all questions affecting their mutual welfare.

The clearing house was originally a labor-saving organization only, but it has developed into a medium for united action. There is a possibility, however, that, when all the banks in the large cities join the federal reserve system, the clearing house will pass out of existence, except perhaps as an association for mutual welfare.

Without going too deeply into the details of the organization and management of clearing houses, the duties of the officers may be briefly sketched. The

president performs the functions usually pertaining to such a position. The manager is selected by the executive committee. He has charge of all the business of the clearing house, and of all clerks employed directly by the clearing house, as well as all clerks present representing member banks. He sees that proper records are kept, imposes fines and makes such reports as the clearing house may require. The executive committee is the governing body. There are other committees appointed or elected in various ways which have charge of special duties.

The exchange of items between the banks accomplishes two results. First, it places at the proper banks for payment the items to be exchanged which the several banks hold; and, second, it determines the difference between the amount of the items held by each bank against all the others, and the amounts held by all the other banks against each individual bank. The difference constitutes the balance which is to be settled.

Settlement of balances is made in various ways. The majority of clearing houses settle their balances in money. Some require gold coin exclusively, and others accept any kind of money except small silver and minor coins, which are excluded because of their bulk and weight when counted in large quantities.

Some clearing houses settle their balances by means of manager's checks on the debtor banks. The creditor banks send to the clearing house for these checks, which may be drawn on any debtor bank. The clerks then present the checks to the debtor banks and secure the money. If the amounts are small, the checks are carried over until the next day and put through the exchanges, just the same as any other check. When this is done, the liability of the manager of the clearing

house for their payment ceases at the close of business on the day when the checks are issued, and the creditor bank assumes the risk of carrying them over.

Another method is employed, by which the debtor banks borrow the credit balances from the creditor banks before actual settlement and thus minimize the actual amount of cash to be handled. The borrowing banks usually pay interest to the creditor banks for the money so loaned.

An important method of facilitating settlements is employed in some cities by means of clearing house gold certificates. The clearing house provides adequate vaults in which gold coin is deposited. The clearing house issues receipts for the gold so deposited in favor of the bank making the deposit. The bank then indorses these receipts and uses them in settlement of its debtor balances at the clearing house. The clearing house pays these out to other banks the same as actual gold or currency. These clearing house gold certificates are recognized by the National Bank Act as equivalent to gold, and may be counted as such in the reserves of the national banks. They are issued in large denominations, usually $5,000 and $10,000, and are valuable only in settlement of balances between clearing house banks. The system makes a safe and convenient method of having gold coin in a non-negotiable form available for payment of large balances.[1]

148. *The process of clearing.*—We have seen how the items are prepared and made ready for the clearing

[1] The interested reader is referred to Mr. James G. Cannon's book, "Clearing Houses," which was prepared for the National Monetary Commission. This can be secured by writing to the Superintendent of Documents, Washington, D. C., and asking for 51st Congress, 2nd Section, Senate Document No. 491. This book contains complete and authoritative information on this subject.

house in the receiving teller's department.[1] All other departments prepare their items for the clearing house in the same way. The clearing hour is usually in the morning. Before the hour of clearing the lists of items prepared by the various departments are assembled and the items put into envelopes and sealed. The total amount is displayed clearly and uniformly on the outside.

The practical operation of clearing is explained so interestingly in Mr. Cannon's book that the author feels he can do no better than quote several pages.

Four rows of desks occupy the (clearing) floor, with sufficient space between for an easy movement of the clerks in delivering the exchanges. Each member has its own numbered desk, separated from the one on the right and left by net-work of wire. At the east end of the room is the manager's gallery, elevated sufficiently to command an easy view of the scene of operations. It is made accessible in front by steps and in the rear by an elevator.

Each business day, at 10 o'clock, the exchanges take place between the banks. About fifteen minutes before the hour designated the clerks begin to arrive. Formerly it was the custom for each member to send only two clerks, but so numerous and cumbersome have become the exchanges of many of the banks that it is now necessary to send one and sometimes two extra clerks to assist in transporting the items to and from the clearing house and in delivering the packages.

The two essential representatives of each bank are the "delivery clerk" and the "settling clerk." The former delivers the packages brought, and the latter receives the return packages from the messengers of the other banks.

Each member sends its items for the other banks made out separately and inclosed in envelopes, with the amounts listed

[1] See Chapter IV, page 290.

on the "exchange slip" attached to the exterior. On their arrival at the house the settling clerks furnish the proof clerk, sitting at his desk in the manager's gallery, with the "first ticket," upon which is entered the "amount brought" or "credit exchange," and which the latter transcribes on the clearing-house proof under the head of "Banks Cr." The total of the amounts thus brought by the several clerks constitutes the right-hand main column of that sheet. If each messenger has a package for each of the other banks, there are 2,500 in all to be delivered.

As a fact, in all other respects than the quantity of packages, this is the number of transactions between the clerks, for it is found in practice better to use a blank slip than to omit a slip merely because there is no amount to put upon it. This plan saves doubt and unnecessary searching when looking after the proof. The stationery used by each of the several banks is put up in sets in numerical order, and this is a reason why it is easier to use all the slips than to discard those which happen to have no items. Accordingly, as the delivery clerks pass the desks, as is described farther on, it is the rule to deposit the "small ticket" with the receiving clerk in each case, whether there is a package corresponding to it or not. When the settling clerks come to make their summing up, first checking back by the small tickets, they find that the blank spaces in their sheets are justified by the blank tickets of corresponding numbers, and are in this respect assured of the correctness of their work.

When the hand of the clock points to a few minutes before 10 o'clock the manager appears in his gallery, usually surrounded by a group of visitors. At one minute before 10 he sounds a gong as a signal for each of the clerks to station himself in his proper place. The settling clerks occupy their separate desks on the inside of the counter, while the delivery clerks form on the outside with their exchanges either on the left arm or carried in a box or case of some light material. The delivery clerks arrange themselves in the consecutive desk order, and stand ready for delivery as they pass along the counter. They carry "delivery clerks' receipts" containing the amounts for

each bank arranged in order upon which the several settling clerks, or their assistants, give receipts for the package delivered.

All are now in position for the exchange. The manager calls "ready," and promptly at 10 o'clock he sounds the gong again and the delivery of the packages begins. He looks down upon four columns of young men moving simultaneously like a military company in step. At the start each advances to the desk in front where his first delivery is to be made. He deposits the package of items and also the receipt slip on which the assistant of the settling clerk (or, in the case of small banks, the settling clerk himself) writes his initials opposite the amount of the package delivered in the blank space provided for that purpose. At the same time, in an opening in the desk provided for that purpose, he deposits a "small ticket" containing the amount of the package. If correct, it must agree with the amount listed on the "exchange slip." This process is repeated at the desk of all the banks, each clerk making the complete circuit in ten minutes to the point from which he started.

Being now at liberty, each delivery clerk takes back to his bank the exchanges deposited by the other messengers, while the settling clerks remain until the proof is made.

The settling clerks, immediately upon the completion of the exchange of packages, sum up, as quickly as possible, the amounts entered on their statements under the head of "Banks Dr." Upon ascertaining the total they make out a "second ticket," containing the credit and debit exchanges and the balance, and send the same to the "proof clerk," who transcribes the debit exchange under the head of "Banks Dr." (the credit exchange having been already entered), and the balance on the credit or debit side, as the case may require.

While this is being done the settling clerks are checking back from the small tickets to ascertain whether the amounts agree with the amounts listed on their statements from the exchange slips. By this time the proof clerk has footed the four columns on his sheet, namely, the debit and credit exchanges and the debit and credit balances. If the former two agree with the latter

two the work is correct, and the result is announced by the manager, who calls off credits and debits.

As he calls off these balances, which are named in thousands of dollars, the hundreds and fractional parts being omitted, the clerks list the amounts on a special slip provided for the purpose, and thereby secure a general report of the balances of the day to take back with them for the inspection of their several cashiers. By these reports the managers of the several banks are informed of those who have balances to be paid them by the clearing house, and also of those who are to pay amounts into the clearing house.

The time elapsed since the manager sounded his gong for starting the work up to the completion of the proof is perhaps forty-five minutes, or possibly a little more. Three-quarters of an hour is the limit before fines are in order against those who have made the errors that prolong the work, but it is not often that it becomes necessary to impose fines. The record time is thirty-five minutes, although the dates when the proof has been reached in thirty-seven to forty minutes from the time the delivery clerks started on their rounds are numerous. When a particularly good showing in this regard has been accomplished the announcement of the result by the manager is very likely to be greeted with applause.

But suppose, as not infrequently happens, there is a discrepancy. The proof sheet does not balance, which clearly indicates that there is an error in the work of one or more of the clerks. The manager immediately announces the difference and the clerks proceed to search for it.

Various methods are resorted to, according to the nature of the difference. Usually the manager calls for an exchange of sheets, to the right or to the left, for examination of footings, and in cases of apparent error in entry the amounts are called back. This is the final method of revision, and if the additions are correct it must make the proof.

Thus far no money has entered into the transaction. Checks, notes, drafts and other items have passed through the exchanges, but as yet no occasion has arisen for the use of a single penny.

Evidently, however, the clearing is not yet complete. Each member has in its possession paper drawn upon itself which the other members have credited in their books, and likewise each member has given in exchange to each of the other members the paper drawn upon them, respectively, and which it has credited upon its own books. But the possibility is very remote that the amounts of the items delivered by any member to the other banks will exactly balance the sum total of the items received from them. Indeed, so slight is the chance of such an agreement that in the whole history of the association there has not been a single instance of this kind, although . . . the approach on one occasion was within one cent of an exact exchange. Hence each day after the exchange the general proof will show a debit on the part of some of the banks and a corresponding credit on the part of others. To complete the clearings, therefore, it is necessary for the banks to settle these balances.

Accordingly, before half past 1 o'clock each debtor bank, in compliance with the requirement of the constitution, pays into the clearing house the amount of its debit balance and obtains a receipt for the same, signed by the assistant manager. After half past 1 o'clock the creditor banks receive at the clearing house their respective balances, and give their receipt for the same in a book provided for that purpose; but in no case can a creditor bank receive its balance until all the debtor banks have paid in.

Practices differ in other cities, but the general routine is much the same.

149. *Bonding.*—Bank clerks must of necessity have access to cash and to books of account at all times. It becomes necessary, therefore, to bond them for the benefit of the bank. Surety bonds are taken out and the premiums paid by the bank. The clerks are usually bonded for not less than $5,000; the tellers, from $25,000 to $50,000. The policy issued covers the clerks in any capacity, so that it is possible for the manage-

ment to shift them from one department to another without giving notice to the surety company. The policy limits the liability of the surety company for each man insured to the amount named in the policy.

Banks also have policies covering the losses which may be incurred by carrying money through the streets or by hold-ups.

The London Lloyds issue a form of insurance under which the insured is reimbursed for any kind of loss, even money lost within the bank which cannot be traced directly to any particular clerk. Under the bond issued by the American companies the defalcation must be traced to a particular clerk.

150. *Defalcations.*—The business man is interested in defalcations of bank clerks only in so far as he is liable to lose money thereby. All bank work is made to dovetail and is subject to counter-checking, so that it requires collusion on the part of at least two clerks, and often more, to carry out a defalcation successfully. It is necessary that confidence be placed in some one, and once in a while this confidence is violated. It is a rare happening, however, for a depositor of a bank to lose money because of defalcations on the part of clerks. It is one of the aims of this book to acquaint the business men of the country with some of the practical bank affairs, in order that they may know when to be on the lookout for such violations of confidence.

151. *Forgeries.*—One of the most dangerous criminals that the banker has to contend with is the forger. He is a clever crook, and if the old adage, "Eternal vigilance is the price of safety," applies to any phase of bank operation, it applies to the paying of checks. The law rightly makes the bank responsible for the payment of forged checks, because it says that

the depositor never gave the bank instructions to pay the amount charged to his account by means of a forged check. The only thing the bank has in its possession to guide it in making payments is the signature before the teller. The differences of opinion in the famous Patrick-Rice case, with reference to the authenticity of the will, may be cited as an evidence of dangers to which a bank is put in the transaction of its daily business of paying checks. The most expert tellers in New York City were called to examine the specimen signatures introduced to the court in this case.

The writer once placed a dozen or more checks before a depositor whose name had been forged to one and he was unable, even with the most careful scrutiny, to pick out the check which he had not signed. Under the circumstances, how is the teller to know when to pay a check and when not to pay it? This is a matter of practice for the teller. He learns by years of study. It is an individual acquisition which no one can gain by reading about the subject. The reason for introducing it at all in this book is, first, to show the business man the necessity of keeping his check book under lock and key, or in the hands of a responsible clerk, and, second, to show the necessity of checking his pass book or statement of account carefully and promptly. It is wiser to stop forgeries when the first one appears, than to allow them to accumulate.

152. *American Bankers Association.*—The American Bankers Association occupied a very prominent position during the discussion of the Federal Reserve Act and the general subject of currency reform. Notwithstanding the public criticisms of bankers by a number of legislators, the result of the long-drawn-out struggle, imperfect as it is in some particulars, is a vast improve-

ment over the first draft of the Federal Reserve Act, and much of this improvement can be attributed to the faithfulness to their trust of the important bankers of the country.

The American Bankers Association is a volunteer organization of the various national banks, state banks, trust companies and savings banks of this country. Conventions are held each year in the month of October, when questions of general interest to bankers and to the country at large are discussed by prominent bank officials. The association maintains offices in New York City and employs various clerks and helpers to keep track of all important matters of legislation in the various states, and to keep the members of the association informed regarding matters affecting the interests of the banks of the country as a whole. A monthly journal is published and is sent to all member banks. The American Bankers Association maintains a central detective agency for the securing of evidence against professional criminals, forgers, etc., who may work injury to any of their members. It has been one of the most efficient organizations of this kind in the country.

There are also various state bankers' associations doing much the same work within their fields.

153. *Travelers' checks.*—During the Spanish-American war, a tax of $50 was imposed upon bankers and brokers dealing in foreign exchange. The express companies had been doing considerable foreign exchange business and the Post Office Money Order Department was also selling a large number of money orders payable abroad. It naturally happened that as these travelers' checks were cashed in this country, the banks were compelled to make the collection of them for their own depositors. Accordingly, the banks made represen-

tation to the Commissioner of Internal Revenue that the express companies should be taxed in the same manner as the brokers dealing in foreign bills of exchange. The Commissioner of Internal Revenue ruled that a money order was not a bill of exchange under the meaning of the Internal Revenue law and that the companies were not liable for the tax. This ruling of the Commissioner of Internal Revenue resulted in a war on the express money order business. It resulted, in the spring of 1909, in the offering to the public of American Bankers Association Travelers' checks. Arrangements were made to make these checks valuable all over the world, and at the present time they are very well known.

Travelers' checks are issued in denominations of $10, $20, $50 and $100 by the various banks throughout the country. The purchaser signs his name in the presence of an officer of the bank issuing the checks and pays for them, plus a commission of one-half of one per cent. When he wishes to pay a bill or secure cash, he signs his name on the money order in the presence of the payee. These checks are redeemed at various important centers of the world at fixed rates of exchange. They are sold at fixed rates of exchange, averaging about $4.90 a pound sterling. Of course, it is possible for the bank to cover these sales of checks by purchase of foreign drafts at lower rates, thus making a profit on the transaction, at the same time making it possible for the user of the check to be repaid without going to the trouble of figuring the amount of money which he should receive in the country where he happens to be.

These money orders are issued through the Bankers' Trust Company of New York, and payment in the various cities at home and abroad has been arranged by them. Checks which are not used may be returned by

the original purchaser and redeemed at full face value at the bank where they are purchased, or at the Bankers' Trust Company of New York City. In selling these checks the American Bankers Association issues information which is of much value to the traveler, and otherwise assists him in the details connected with his journey.

154. *Saving stationery and supplies.*—Banks are generous in the matter of giving away supplies. Depositors rarely appreciate the amount of expense involved in this matter. Pass books cost not less than fifteen cents apiece. The smallest check book costs from six to fifteen cents. They contain fifty checks each. Assuming an average of ten cents per book, this means one-fifth of one cent for each check. Large check books cost from a dollar to a dollar and one-half each, and if the names of the depositors are printed on them on the end of the check, and the book numbered, the cost ranges from one dollar to three dollars extra. Deposit slips, which are so often used for memorandum paper by the depositor, cost less, of course, but the volume of these used, even in a small bank, is astounding. Individual ledgers are usually specially made. They cost from fifteen to thirty dollars each. There are many other expense items of bank routine which do not concern the individual depositor directly, but which enter into the cost of the service rendered.

155. *Conclusion.*—We may safely conclude that the bank is a vital force in the community. It is an organization that we cannot do without. It tries to give efficient service, because in so doing it serves its own interests best. The interests of the depositors are best served by an intimate relation between the bank and the depositor.

PART III. FOREIGN EXCHANGE

CHAPTER I

MECHANISM OF THE EXCHANGE MARKET

1. *Exchange defined.*—The system by which one country discharges its debts to another is called foreign exchange. This indebtedness may arise from shipments of merchandise; from money loaned, or invested abroad, or from the interest on such funds; from payments by one country to another for freights, insurance, or the expenditures of its citizens travelling abroad.

The rate of exchange is best defined as the price of the money of one country reckoned in the money of any other country. In speaking of the rate of exchange current between Great Britain and the United States, for instance, 486 means that, in New York, a draft drawn on London can be bought at $4.86 for each pound sterling in it. The mint par of exchange is the price of the gold unit of one country expressed in the money of some other country. The gold in a British sovereign, for instance, is worth $4.8665 at any United States assay office—the rate of $4.8665 is, therefore, the mint par of exchange between Great Britain and the United States.

2. *How exchange is quoted.*—The three principal rates of exchange are those for sight drafts drawn on London, Paris and Berlin.

Drafts on London are quoted at so-and-so-much per

pound sterling, the fluctuations progressing by five one-hundredths of a cent per pound—for example, $4.86, $4.8605, $4.8610. The old method of quoting sterling drafts by eighths ($4.86, $4.86⅛, $4.86¼) still obtains to some extent, but is being rapidly discarded in favor of the closer and more reasonable system of decimals.

Drafts on Berlin are quoted at so-and-so-many American cents for each four marks. Thus a price of 95⅛, quoted to a man who wants to buy a draft drawn in marks on Berlin, means that for every four marks he wants he must pay $.95⅛. Progression in the case of this quotation is by sixteenths—95, 95 1/16, 95⅛, for example. In order to bring these quotations closer there may be added or subtracted slight percentages, as, for instance, 95⅛ + 1/16%, or 95¼ − 1/16%. In turning marks into dollars at one of these rates, it is to be noted that the percentage mentioned is to be added or subtracted from the dollar-proceeds after conversion at the regular rate has been made; thus in figuring, say, 1,000 marks at 95⅛ + 1/16, first convert the 1,000 marks at 95⅛, adding to this dollar-product one-sixteenth of one per cent. of itself.

The quotation of marks at so-and-so-many cents for *each* mark rather than at so-and-so-many cents for each *four* marks would seem to be far more reasonable, but the custom has come down from times immemorial and shows no sign of changing.

Drafts on Paris, unlike drafts on Berlin or London, are quoted at so-and-so-much of the foreign currency for each American dollar. Thus a quotation of 5.18⅛ means that 5.18⅛ francs can be bought for one dollar. A moment's thought will show that the higher the figures in the rate, the lower the rate actually is. Drafts on Paris are cheaper, for instance, when 5.18¾ francs

can be bought for a dollar than when only 5.18⅛ francs can be bought. Progression is by five-eighths of a centime (a centime is a hundredth of a franc) per dollar: thus 5.18⅛, 5.18¾, 5.19⅜, etc. As with marks, quotations are brought closer together by the use of percentages. Thus a seller of drafts on Paris wanting to charge a customer a little more than, say, 5.18⅛, but not wanting to charge as much as the next regular quotation (5.17½) might fix a price of 5.18⅛ — 1/16. That would mean that for each 5.18⅛ francs in the draft, one dollar would be charged; in addition to which there would be a charge of 1/16 of one per cent.

3. *Underlying principles.*—Underlying the whole business of foreign exchange is the system by which the creditor draws a draft upon the debtor—by which, for instance, a cotton firm in Nashville, Tenn., which has sold 100 bales of cotton to a spinner in Liverpool, draws a draft upon the Liverpool firm for £1,000. That is the origin of practically all foreign exchange business—some one is owed money and in order to get it draws upon the man who owes it to him. The draft he draws is called a bill of exchange.

How this simple operation develops into a transaction in foreign exchange is best shown by using a concrete example. Take the case of the cotton merchant who has sold his 100 bales and drawn his draft for £1,000 on Liverpool. Such a draft, in pounds sterling, is in itself of no use to him. Before he can make use of it he must manage to convert it into American money—find someone who will buy it and give him dollars for it. Such a man is the foreign exchange banker. He keeps an account in Liverpool, and is willing to buy the draft from the cotton man in order to send it over there and have

it placed to the credit of his account. "The price of a pound sterling to-day is $4.86," he says. "I can pay you $4,860 for your draft on Liverpool for £1,000." The cotton merchant accepts, takes his check, and is out of it. He has sold his cotton, gotten his money, and is ready for a new transaction.

But why was the banker willing to buy that draft for £1,000, and why does he keep an account in pounds sterling over in Liverpool? Simply because customers who have payments of one kind or another to make on the other side are continually coming to him to buy drafts in pounds, and he wants to be in a position to sell them what they want. When he takes that £1,000 draft off the hands of the cotton merchant and sends it over to be deposited to his credit in Liverpool, he knows very well that he can always draw his own draft for £1,000 and sell it for dollars at whatever happens to be the current rate of exchange. If he paid $4,860 for the £1,000 draft he bought, and sells his own £1,000 draft for, say, $4,870, he has clearly made $10 on the transaction. And that is what the foreign exchange banker is in business for—to buy drafts, deposit them abroad for his credit, and then sell his own drafts against the balance at a higher rate of exchange.

Needless to say, the illustration given is elementary; bankers do not make money exactly as stated—the operation described is the very simplest and would not result in bankers making much money. At the same time it is the principle underlying the whole business, the principle on which a clear understanding of the foreign exchange business as it is carried on absolutely depends. Everything is built up around it. Every move the foreign exchange banker makes depends upon his being

GUARANTY TRUST COMPANY

OF NEW YORK.

EXCHANGE FOR

£.....*Stg.* *New York,*.....191.....

On demand please pay.....

or order (Original being unpaid) the sum of.....*Sterling*

which charge to New York account

To
Guaranty Trust Company of New York,
33 Lombard Street,
London.

No.....

.....

.....
MANAGER

able to buy bills drawn by creditors on debtors, and on his being able readily to sell bills drawn against balances he is carrying abroad.

It is customary for bankers who are doing a regular foreign exchange business to carry a balance with their foreign correspondent (they often have several in each big city) and then by each mail-steamer to remit a great quantity of different kinds of exchange, drawing their own drafts against the bills they are remitting, and so keeping the original balance about stationary. A large house will frequently send over as much as £500,000 worth of bills in one mail for the credit of its account. The descriptive sheet accompanying this mass of bills is apt to have recorded on it about every kind of foreign exchange in general use. Following is a description of different kinds of bills taken from the remittance sheet of one of the largest drawers of exchange in the country.

4. *Commercial long bills.*—Drafts drawn at from thirty days' to six months' sight upon foreign buyers of merchandise or upon banks abroad designated by them. Exchange of this kind is usually accompanied by bill of lading (receipt from the railroad or steamship line showing that the merchandise has been shipped), invoice of the goods, and often by insurance certificate showing where and for how much they have been insured.

Drafts of this kind drawn against shipments of cotton, corn and wheat, make up the bulk of the commercial foreign exchange handled in the New York exchange market. Where the drafts are drawn on a very good house abroad or on a bank, the bill of lading is deliverable upon "acceptance" of the draft by the parties on whom it is drawn. Where the drawee's standing is less well known or where the merchandise is perishable, documents are deliverable only on actual payment of the

GUARANTY TRUST COMPANY

OF NEW YORK.

EXCHANGE FOR

£.....*Stg.* *New York,*.....191....

Sixty days after Sight of this FIRST of Exchange (second of the same tenor and date not paid) pay to the order of

430 | 1 |

Sterling

value received, which charge with or without further advice to account of

Guaranty Trust Company of New York,

To

Guaranty Trust Company of New York,

33 Lombard Street,

London.

No.....

.....

.....

MANAGER

draft under discount. In the case of a draft marked "documents for acceptance," therefore, the party abroad which has bought the goods can get them out of the ship as soon as it—or the bank which represents it—has "accepted" the draft. Where the bill of lading is deliverable only on "payment" the consignee has to pay the draft (less a rebate for the unexpired time it has to run) before he can get hold of the bill of lading to get the goods off the ship. "Acceptance bills" are, therefore, *discountable;* "payment" bills, *rebatable* at the current rate for loans. The rate for short loans in London usually ruling lower than the discount rate, bills for payment drawn against perishable goods which *must* be paid under rebate as soon as the goods arrive, command a better rate of exchange than even the best bills where documents are to be handed over to the consignee on acceptance. Differently expressed, the idea is that a higher rate of exchange is commanded by a grain "payment" bill than by a cotton "acceptance" bill, because in the discounting process in London less pounds sterling will be taken off the face of the grain bill than off the cotton bill.

Documentary exchange drawn by reliable parties is a fairly safe kind of exchange in which to deal, the buyer being protected by the bill of lading which is endorsed over to him. As long as the buyer of the exchange or his agent abroad retain the bill of lading, they are perfectly safe; it is in the case of acceptance bills, therefore, where the documents pass out of possession as soon as the drawee accepts the draft, that the element of risk comes in. For which reason the greatest care is exercised not only as to the maker of the bill, but as to the drawee as well, documents never being surrendered to the latter unless his standing is absolutely satisfactory.

5. *Bills of exchange that involve more or less risk.*—Concerning the risk incurred in the purchase of documentary exchange, A. W. Margraff in his book "International Exchange" writes as follows:

Bills of exchange that may be purchased safely.—Bills accompanied by documents covering staple, non-perishable merchandise that can be readily resold in the market where consigned, in the event of forced sale, by reason of non-acceptance or non-payment by the drawees of the appertaining bill, and the inability of drawers to reimburse the purchaser of the bill upon demand for the amount originally paid them, plus expenses.

The proceeds realized upon merchandise disposed of under forced sale would be applied on account of the amount of reimbursement demanded of drawers, and provided the merchandise was of the nature just referred to, would almost liquidate the purchaser's claim against the drawers, and the small balance, still due to the purchaser, may be recovered with little difficulty from the drawers. If, however, they have failed in the meantime, then the purchaser would have a creditor's claim for such balance against the insolvent drawers.

The possibility of such a loss is very remote in view of the fact that the majority of drawers of bills of exchange (exporters) have all refused bills immediately referred to their own agents abroad for protection.

Staple and non-perishable merchandise includes flour and other manufactured cereals such as corn meal, oat meal, hominy, etc.; farming implements, canned meats, fresh meats and other provisions, when the fresh meats and provisions are shipped in refrigerator cars and vessels of modern type, and warehoused in cold-storage plants upon the arrival at destination, if not immediately taken up by drawees.

Bills involving more or less risk.—Bills accompanied by documents representing shipments of perishable merchandise, such as butter, cheese, fresh fruits, etc., that are liable to deterioration in quality, or to absolute loss, during transit.

Bills with documents showing collateral security of live cattle, horses or other live animals, necessitating the expense of help and feed during transit for the maintenance of life, as a refusal of such annexed bill would *depreciate* the value of the security, day by day, to the extent of such expense incurred.

In addition to the liability of drawers and endorsers, if any, purchasers of documentary bills are secured by the financial responsibility of the acceptors *on and after acceptance* until actual payment of the bills.

The liability of drawers continues after the acceptance of bills, and remains in force during the whole life of the bills, and ceases only upon payment.

The primary conditions of the desirability of the purchase of any bill of exchange depend upon the moral and financial standing of the parties thereto, and the liabilities just stated of the parties should be quite ample in the majority of cases. Further, these bills possess another element of protection against a possible loss in this, that they are supplemented by documents covering salable merchandise with title continuing in the purchaser of the bills, until payment at maturity, or retirement prior to maturity, of the respective bills of exchange.

6. *Clean commercial bills.*—Bills drawn by commercial houses in one country on houses in other countries, at anywhere from thirty days' to six months' sight and unaccompanied by documents.

Of all classes of exchange this is about the most risky in which to deal, for which reason bills of this class can be had at lower rates than almost any other kind. The banker buying a bill of this kind has absolutely no security except the standing of the firms concerned. The actual shipments, payment for which is represented by the drafts, may have been made months before, or they

may not have been made at all—about that the banker buying the bills knows nothing. When he buys clean commercial bills he does so absolutely on the standing of the drawer and the drawee. A good many foreign exchange bankers make it a point never to buy this class of bill at all.

7. *Drafts drawn against securities.*—Out of international trading in securities there originates an enormous volume of foreign exchange business. A banker in New York, for instance, sells a block of bonds to a firm in London and draws upon the firm in London for the purchase price converted into pounds sterling at the prevailing rate. To this draft are attached the securities, the whole being then sold in the open market. Exchange of this class is, of course, about the safest to buy that there is. The buyer of the draft gets the bonds as collateral and does not give them up until the draft is paid on the other side.

Sales of stocks as well as of bonds furnish a large amount of security-bills. "Buy for us 100 shares of Union Pacific preferred and draw on us for the amount due," comes a cable from a house in London to a house in New York. The order is executed, the stock bought, and a draft for the amount expended drawn upon the house abroad which sent over the order. Here again the stock itself is attached to the exchange, insuring for it a quick sale in the exchange market. A form of bill to the purchase of which there attaches less risk could hardly be imagined.

8. *Bankers' long bills.*—Drafts drawn at sixty and ninety days' sight by bankers here upon bankers abroad are coming to take an increasingly important part in international exchange operations. Such bills of ex-

change may be divided into three classes: (a) long bills arising from the regular conduct of foreign exchange business; (b) long bills originating from the operation of loaning foreign money in this market; (c) long bills sold without security for the purpose of raising money —so-called "finance-bills."

With regard to the first class of bills, it need only be said that every banker doing a regular foreign exchange business is continually called upon to furnish customers with bills of exchange drawn at sixty and ninety days' sight. Take, for example, the case of a merchant here who owes a merchant abroad £1,000, due in two months, but who has the money on hand and wants to pay off the debt. He might buy a demand bill of exchange and get the merchant abroad to give him a rebate for the period of prepayment; but a far better way would be to go to his banker, get from him a sixty-day bill of exchange and send that. This is only one of a thousand different sources from which may spring a demand for bankers' long bills. Any banker at all actively engaged in the business must at any time be prepared to furnish customers with exchange of this kind.

9. *Long bills from loaning foreign money.*—The second class of bankers' bills originates from loaning operations. To appreciate fully the nature and standing of these bills, it is necessary to understand the mechanism of the loaning of foreign money in this market. Take, for instance, the case of a house in London which decides to lend money out here. Its American correspondent is notified, and the question having been settled as to whether the loaning house wants to take the risk of exchange and accept a fixed rate of interest on the money,

or whether the loaning house would rather accept a commission and leave the risk of exchange to the borrower, the operation goes forward about as follows:

Suppose the London house to have chosen that the loan shall bear, say, 4 per cent interest, the risk of exchange to be taken by itself, the lender. The first step is the drawing by the American house of an amount of ninety-day exchange exactly equivalent to the amount of American currency to be loaned out. Thus, if the loan is to be for $100,000, and the rate realizable for ninety-day exchange is 485, the American house draws a draft on the lender in London for £20,618. This draft it sells in the open market, realizing thereon exactly $100,000 which, upon deposit of satisfactory collateral, it turns over to the firm here to whom the loan has been made. The latter will then have the use of the $100,000 for ninety days, at the end of which time it must pay it back, plus 4 per cent interest, to the American correspondent of the English lender.

So far as the actual borrower of the $100,000 knows, the loan is a regular loan of American currency—he has no way of knowing that the money he is receiving is a product of bills of foreign exchange, or, indeed, that there is any question of foreign exchange involved. He has borrowed $100,000, and at the end of ninety days he will have to pay it back with 4 per cent interest. Beyond that his concern in the matter does not extend. But with the two banking houses who have lent the money the case is different. With them it is very much of a question of foreign exchange rates. They began the operation by selling £20,618 of ninety-day sight bills, and at the end of ninety days those bills will come back and have to be paid. What rate has to be paid in order to secure demand bills with which to meet the maturity of the "nine-

ties" originally sold will have a good deal to do with what they will make on the transaction. If, during the life of the loan, exchange rates have gone down, they will be able to buy in the necessary demand exchange at a low price and make good profit on the transaction. But if rates in the meantime have risen, a price may have to be paid for the necessary exchange which will wipe out all profit on the transaction. Not infrequently it happens that enough of a rise in exchange takes place to cause the whole operation to show an actual loss to the lender.

In the other kind of a foreign loan where the lending banker does not care to take the risk of exchange, he lends out bills of exchange instead of dollar proceeds of bills of exchange, and charges a commission instead of a fixed rate of interest. The borrower, in this case, instead of receiving a check for $100,000, would receive a ninety-day bill for £20,000. This he would immediately sell for dollars, but when the time for repayment came along three months later, he would have to pay back, not dollars but a demand draft for £20,000 plus the commission (usually 3/8 per cent on ninety-day loans). In this case it is evident that it is the borrower who takes all the risk of exchange, the cost of the loan to him depending upon what he has to pay for the £20,000 demand which he must return at the end of ninety days. The banker, of course, makes only the commission, but that is fixed—he knows exactly what his profit is going to be.

Because of the speculative element which attaches to loans of foreign money in this market, they are a favorite form of operation with many houses. Take, for instance, the case of a borrower of money who figures out that the exchange market is bound to decline within a few months. By getting some foreign banker to lend money to him on the basis of his, the borrower, taking

the risk of exchange, he can practically get himself short of the exchange market, and if he is right in his forecast he can get the use of the money for nothing, or even make a profit out of the deal. Similarly with the banker. Frequently it happens that foreign money is pressed on the market here on the idea that exchange rates are about to go down and that the lender of the money, by assuming the risk of exchange himself, can make a big return on the money put out.

10. *Finance bills.*—These are the other great class of bankers' long bills in the exchange market. Concerning the exact meaning of "finance-bill" it is surprising what a difference of opinion exists even among well-informed writers on exchange; but concerning the present meaning of the term as it is used in the exchange market in New York, there is no chance for any difference of opinion. Among practical exchange men a finance-bill means just one thing—an unsecured long bill of exchange drawn by a banker in one country on a banker in another and sold for the purpose of raising money. Sometimes the drawer carries a balance with the drawee, sometimes not; usually not, the drawee "accepting" the long bill drawn upon him for a fixed commission. Needless to say, the house abroad has to have a high opinion of the house here, or has to be in pretty close connection with it, before it will agree to accept its unsecured drawings to any extent.

This is the finance-bill as it is—not widely different from accommodation paper among international bankers. The house of Jones and Company in New York, which enjoys good standing and has close connections with Smith and Company in London, wants to raise additional money for some purpose. A credit is arranged with Smith and Company in London and the

New York house draws upon them in sterling for the amount required. The bills are then sold and Jones and Company finds itself in possession of the money it needs. For ninety days it has the use of that money, at the end of which time the bills it drew in the first place will be coming due and demand drafts will have to be sent across to meet the maturity. Usually the arrangement calls for the privilege of renewal, which works out as follows:

Suppose at the end of ninety days, Jones and Company in New York find it inconvenient to put up money with which to buy demand exchange in "cover" of the bills they drew ninety days previously. Yet those bills are maturing and have to be met. So, in order to raise the money with which to buy the necessary demand exchange, Jones and Company sell a *fresh* lot of ninety-day bills. Just here there is an important point to be noted. To take a concrete case, suppose that Jones and Company of New York originally drew £10,000 of ninety-day sight bills and that the exchange market did not materially change between the time the bills were drawn and the time when it became necessary to "cover." Say that when the "nineties" were sold Jones and Company realized $48,700 for them, demand exchange standing at 487. The finance-bills fall due and have to be covered, but Jones and Company decide to renew them by drawing more nineties. From the sale of £10,000 nineties at 484 they would not realize within $300 of enough to buy the necessary demand at 487. That difference represents the interest on the transaction. Usually, when connections are close, instead of drawing for exactly £10,000, the second time, Jones and Company of New York would draw for enough more, say £10,060, so that there would be no

real balance to pay. Such a process may be continued indefinitely—is being continued indefinitely, in fact, by many banking houses in New York who have come to regard the money to be raised by the sale of these finance-bills as part of their regular working capital.

11. *Limitations to finance paper issue.*—Where is the limit to the practice? Only in the credit of the houses concerned, in the willingness of the exchange market here to absorb offerings of their long paper and the willingness of the London bankers to discount it when it is sent abroad. Otherwise there is no check upon the amount of finance-paper that a house might put out. No mark distinguishes it from any other kind of long bill; the banker who buys it cannot tell whether he is buying a bill of exchange secured by railroad first mortgage bonds or whether it is a finance-bill put out with nothing back of it to "raise the wind." There is no way for him to tell. His protection and his only protection is in the character of the drawer and the acceptor and in his knowledge of how much of the paper there may be knocking around in the open market.

Finance-bills have at times played a very important part in our financial history, the last time being in 1906 and 1907. That episode was thus recently described by John Gardin, vice-president of the National City Bank, New York.

> Finance bills were issued in this country up to the spring of 1907 in enormous quantities. It was estimated that in the fall of the year when these bills generally are paid off, there was running all the way from $250,000,000 to $300,000,000 in finance bills. The merchants, particularly here in the East, have credits in the financial institutions abroad and sell these bills here and get their money. The brokers in Wall Street instead of negotiating time money here, negotiate sterling loans.

These loans are generally put out in the spring of the year when exchange is high, due to the enormous amount of imports that have to be paid for. They are generally issued so as to bring their maturity in the fall when the exports of staples from this country prevail and exchange rates are very low. The result is that where a man issues a bill originally when exchange is high and redeems it when the exchange is low, together with the commission he has to pay and the discount he has to allow, he finds as a general rule he pays a very low rate of interest; in some cases, 1 to 1¼ per cent.

In 1906, before the San Francisco disaster, we had quite a large gold importation and a great howl was raised in England by the financial writers to the effect that the enormous gold importations were facilitated by the credits granted for these long bills, by banks over there permitting their names to be used. There was quite a crusade against them. Any bank in London making a practice of loaning money in this country by means of these acceptances was looked down upon. In 1907 most of these credits were canceled. I don't believe $25,000,000 or $30,000,000 were owing to Europe in July and August on the strength of these credits. The result was that when the export season started in, due to the hard time we were having, and exports assumed undue proportions, there was no offset in the way of the redemption of these credits. In consequence, Europe had to give up its gold.

CHAPTER II

HOW MONEY IS MADE IN FOREIGN EXCHANGE

12. *The sale of demand exchange.*—Foreign exchange transactions, nowadays, are of considerable scope and endless variety, but all are based fundamentally on five different kinds of operation.

Selling demand exchange and cables against remittances of demand exchange is the elementary principle of the business. Suppose an exporter here to have shipped $5,000 worth of merchandise and to have drawn his draft on the foreign buyer for £1,000. He takes this draft to his banker and sells it at the current rate of exchange, say 485. The latter sends the bill to his correspondent abroad for credit of his account, drawing at the same time his own check for £1,000 against the deposit and endeavoring to sell it at a higher rate than 485. Outside the expense of conducting the business, anything over 485 that he can get for his draft is clear profit. The two transactions cross off. It cost him $4,850 to buy the commercial draft in the first place. By the sale of his own draft he received, say, $4,860. He may not have been out of the use of his money for five minutes, and as to his balance on the other side, the deposit of £1,000 and the draft on the balance for £1,000 arrive by the same mail steamer.

13. *Merchant seller's credit.*—Naturally, the credit of a merchant selling a commercial draft enters very largely into the transaction—determines, in fact, what rate the banker is willing to pay him for his bill of ex-

change. Here, evidently, is a chance for taking risks and making profits. It not infrequently happens that a banker comes to believe that some exporter who is not generally considered strong financially is really all right, and he buys his paper continually, though always at a big reduction from the market for prime bills. Two cents per pound sterling is not infrequently the profit on purchases of exchange of this kind. It is a form of business which a good many bankers refuse to touch at all, but on the other hand there are foreign exchange houses with well-equipped credit organizations who go in largely for just such transactions, and as long as they can avoid the purchase of bad paper they make very large profits. The business, too, can be done with a varying degree of risk, one banker being often in a position to sell his own demand draft at a little better rate than he is offered the demand draft of some other banker. In that case the profit is apt to be small but so is the risk, and an easy chance is afforded to make from one-tenth to one-quarter cent per pound sterling on the amount turned over.

The other form of activity along this line is the selling of "cables" against remittances of demand drafts. A cable transfer works as follows: A in New York has a credit balance in London; B, also in New York, comes to him and says, "I want you to wire your correspondent in London to hand over so-and-so-much in pounds to *my* correspondent over there. I'll pay you the equivalent on this end." The rate is fixed and A wires to the London bank which holds his money to make the transfer to B's bank, the whole operation being closed inside of twenty-four hours. In point of time we are five hours behind London so that unless the trans-

fer is wired early in the morning it will only take place the following day.

14. *Banker's London balance.*—In order to be able to sell cable transfers, the banker, clearly, must carry an adequate balance in London and must be constantly replenishing it with deposits of exchange. Sometimes when his balance has run down and he finds he can sell a cable very advantageously he will go ahead and do it, making good the deficit by buying a cable himself at a lower rate. But this selling of cables against cables is unusual and takes place only under exceptional conditions. Bankers who make a practice of selling cables usually see to it that their balances are kept up by continuous remittances of exchange. They have bills arriving in London by every mail for credit of their account, and are almost invariably in a position to wire their correspondent to pay out large sums to whomsoever may be designated in the cable. The cable, incidentally, involving as it does the payment of large sums of cash, is the product of an elaborate cipher code, and is arranged with check-words and key-words which prevent any possibility of fraud.

15. *Interest on cable transfers.*—Cable transfers, being immediate, command a higher rate of exchange than even the primest of demand drafts, which must necessarily lie on board ship for a week before they become of any practical use to the purchaser. The purchaser of a cable transfer, in fact, loses no interest at all. He makes payment here and simultaneously the money is paid over to the credit of his account abroad. In the case of a demand draft he makes payment when he buys the draft and for a whole week is out of the use of his money. The interest rate, therefore, is one of the prime factors in determining the difference in the rate of

exchange between cables and demand bills. When money is high the buyer of demand bills loses a good deal of interest and the quotations tend to diverge. When money is cheap the quotations come very near together. During the long 1908–09 period of cheap money, cable transfers and demand bills of exchange continually sold less than one-half cent per pound sterling apart.

Under such conditions there is but little money to be made out of cable transfers against remittances of demand exchange, but the business is clean and safe and the small margin of profit amounts to a good deal of money where the sum turned over is large. There are some financial institutions in the larger cities whose policy it is to keep large sums on deposit in London and Paris and who make a specialty of selling cable transfers against these deposits, replenishing them continually with remittances of prime bankers' bills. Fifteen points (that is to say 15/100 of a cent per pound sterling) is considered a fair profit on business of this kind. In the course of a day's business, for instance, if one of these banks sold £50,000 of cables the net profit would probably figure out to be between $75 and $100. Not a very large amount on a transaction involving a quarter of a million dollars, but enough to make a good many banks engage in the business and on a large scale.

16. *Against remittances of sixty and ninety day bills.* —Selling demand drafts against remittances of sixty and ninety day bills is the second important form of activity in foreign exchange, operations of this kind constituting, in fact, the main bulk of the business. Most of the merchandise sold in Europe by American merchants is sold on a sixty or ninety day basis; that is to say, a cotton firm which has sold cotton in Liverpool,

or a grain house which has sold grain in London, is apt to draw its drafts against the merchandise shipped, at sixty or ninety days' sight. Some of these drafts are drawn direct upon the foreign buyers; some of them on foreign banks designated by the buyers with whom they have opened credits for the importation of the merchandise.

17. *A typical example.*—In any case, practically all of these sixty and ninety day drafts are bought by bankers who want to use them in the conduct of their foreign exchange business. A cotton firm in Memphis, for instance, has sold 100 bales of cotton in Liverpool and drawn the draft, as previously explained, with the proper documents attached. The bill is then sold to a banker, perhaps in Memphis or in New York. Suppose, for the sake of illustration, that it has been sold to Messrs. Jones and Company in New York, who pay a rate for it according to the standing and strength of the drawer and the "usance" of the bill—the time for which it runs. A bill running for ninety days, for instance, commands a lower rate of exchange than a bill on which the holder can get his money at the end of sixty days.

Jones and Company in New York having received the bill and paid for it, immediately send it to, say, Smith and Company in London. What happens then depends upon the nature of the bill, whether the documents are for "acceptance" or "payment" as explained in section 4. If the documents are to be delivered on acceptance, Messrs. Smith and Company get the bill accepted as soon as possible and then have it discounted in the open market, placing the proceeds to the credit of Jones and Company, New York. If the documents are deliverable on payment only, Smith and Com-

pany get the bill accepted just the same, retaining the documents, however, until the consignees come around and offer to pay the draft under rebate of interest for the unexpired time. In the case of an "acceptance" bill, therefore, the proceeds become an available balance abroad just as soon as the bill can be accepted and discounted. In the case of a "payment" bill, the remitting banker cannot count on having the balance available until the bill actually comes due, though pre-payment may place the funds to his credit long before that time.

18. *Opportunity for profit.*—Hence in the remitting of sixty and ninety day documentary "payment" and "acceptance" bills and the drawing of bankers' demand drafts against the proceeds, there is a good deal of leeway and a chance to make considerable profits. Rates commanded by the documentary bills vary widely; discount rates abroad vary on different bills; "payment" bills are prepaid at varying periods before their maturity. Altogether, when a banker begins to engage in remitting large amounts of commercial long paper and drawing his own drafts against the resulting balance, he is undertaking a form of operation the profit on which is governed by a number of different factors.

19. *Loaning foreign money on joint account.*—This is another profitable form of activity for a foreign exchange department. Description of the bankers' long bills arising from operations of this kind has already been given, but for a clearer understanding of the matter it is necessary to know the theoretical as well as the practical end.

20. *Ninety-day bill operation.*—Underlying all operations in the loaning of foreign money in this market is the idea that a ninety-day bill of exchange drawn

by a banker here upon a banker abroad can be readily converted into American money. A banker on the other side who makes up his mind to loan £10,000 in New York is not called upon to put up any real money; all he has to do is to "accept" a ninety-day draft drawn upon him. This is something which it is exceedingly important to bear in mind. The loaning banker is not limited by the amount of his deposits or even by the amount of his capital, except insofar as other bankers let these considerations govern them in the amount of his paper that they are willing to take on. But as long as the discount market absorbs the long bills he has "accepted," he can go on accepting up to any amount he chooses.

As previously explained, the foreign banker "accepts" these drafts drawn upon him on the understanding that before they fall due, demand exchange will have been sent him by the drawers of the long bills with which to pay them as they are presented. Suppose, for instance, that in one of these loaning operations, A in New York has drawn a ninety-day bill in pounds sterling on B in London, and that B has "accepted" the draft. B has not put out any real money; all he has done is to put his name on the draft, obligating himself to pay it at the end of ninety days. By that time, he well knows, his correspondent in New York will have sent him demand bills out of which to make the payment.

21. *Loaning on credit.*—In considering the question of loaning out foreign money from the standpoint of the bankers engaged who want to make money out of it, it is to be noted that neither the banker abroad nor the banker here are ever out of any actual cash at any time. The foreign banker, as has been seen, "accepts"

a draft and later receives the medium with which to pay it. The American broker draws the loan-bills, puts out the money as agreed, and gets it back in time to remit the necessary demand exchange to the banker abroad who has done the "accepting." Neither party, then, has had to put up a cent of capital. Credit only has entered into the transaction, and anything that has been made out of it is clear profit. Sometimes the operation is transacted with the foreign banker taking all the risk and all the profit except the commission he allows to his American representative. Sometimes the operation is transacted on joint account. In that case the risk and the profits are equally divided. Such an arrangement works rather to the advantage of the foreign banker, assuring him as it does of the utmost care in the handling of the money. As for the commission, in order to get the business properly taken care of on this end, he has in any case to pay some American banker very nearly half of what he can make out of the transaction.

22. *Risk of exchange.*—Bearing further upon this question of commission, it is to be noted that it makes a great deal of difference whether the money is loaned out under an arrangement by which the banker takes the risk of exchange, or whether the borrower takes that risk—as fully explained in paragraph 9. In the case where the banker takes the risk of exchange he receives just so-and-so much from the borrower, 3, 4, 5 per cent as the case may be, and out of that has to come the difference between what he was able to realize from the sale of the ninety-day loan bills and what he has to pay for the "cover" ninety days later. Even if the exchange market has stood still in the meantime this difference in the two exchange rates is bound to be quite an item, and it reduces what

he makes on the whole business to a pretty small percentage. But then the fact must not be lost sight of that he has never had to put up any capital at all and that anything he makes is clear profit. In case the loan has been made on the other basis, with the borrower taking the risk of exchange, the borrower pays the banker a fixed rate of commission—usually three-eighths of 1 per cent on ninety-day business. The banker makes that clear, for the borrower to whom he has lent, say, £10,000 of ninety-day bills, is obligated to return to him £10,000 of demand exchange at the end of ninety days. If the borrower can buy in this "cover" cheaply, by so much is the cost of the loan to him reduced. As for the banker, it makes no difference to him what the exchange market may do; he gets his three-eighths per cent commission (equal to 4 times $\frac{3}{8}$ per cent = $1\frac{1}{2}$ per cent per year) and is out of the transaction.

23. *Commissions on loans.*—Large profits are at times made in loaning foreign money in the two ways described. The interest rate may seem small but the amounts involved in operations of this kind are enormous and even a small commission may mean a very large profit—in one month (October, 1902) one of the trust companies doing a foreign exchange business in New York cleared nearly $25,000 from commissions on sterling loans, excellent collateral being deposited and the borrower in every case taking the risk of exchange. Examination of the books of some of the big banking houses making a specialty of lending out foreign money here would probably show profits far in excess of the amount made by this trust company.

24. *Profits made from the purchase of exchange.*—

Buying foreign exchange for investment is still another source of profit to the foreign department. It sometimes happens, for instance, that for one reason or another discounts rise in Europe, driving down the rate of exchange for sixty and ninety day bills. When this takes place, if money is easy here, bankers are likely to buy large amounts of long exchange, not for the purpose of having it discounted and placed to their credit as usual, but for the purpose of actually holding it to maturity.

25. *Time money rates on call money basis.*—The purpose of such an operation is to take advantage of a depressed market for long bills. Suppose that on account of one of Europe's not infrequent war-scares or for any other reason, discount in London makes a sharp advance, correspondingly depressing the rate of exchange for "sixties" and "nineties." A banker who buys the latter with the purpose of holding rather than of discounting is pretty sure to be making a good rate of interest on the money he has laid out. As the bill nears maturity it breaks away from the influence of the high discount rate, becoming eventually demand exchange. In the meantime, if discount has gone down, the rate at which the banker can resell his bill has gone up. For there is always a market—always the closest kind of a quotation on exchange of whatever usance. After the bill has run forty-five days, and has fifteen days left to run, the banker, if he wishes, can instantly dispose of it. And just here is one of the most attractive points about this business of investing in exchange—the buyer gets time money rates on a call money basis. The price he pays for the bill is governed by the time rate and that is what he gets if he holds the bill to

maturity. But if at any time he wants to terminate the loan, so to speak, all he has to do is to resell the exchange, and he is practically certain to find a ready purchaser.

26. *Dealing in futures.*—Describing how money is made in dealing in "futures," the author says in his book "The Elements of Foreign Exchange":

As a means of making—or of losing—money, in the foreign exchange business, dealing in contracts for the future delivery of exchange has, perhaps, no equal. And yet trading in futures is by no means necessarily speculation. There are at least two broad classes of legitimate operation in which the buying and selling of contracts of exchange for future delivery plays a vital part.

Take the case of a banker who has bought and remitted to his foreign correspondent a miscellaneous lot of foreign exchange made up to the extent of one-half, perhaps, of commercial long bills with documents deliverable only on "payment" of the draft. That means that if the whole batch of exchange amounted to £50,000, £25,000 of it might not become an available balance on the other side for a good while after it had arrived there—not until the parties on whom the "payment" bills were drawn chose to pay them off under rebate. The exchange rate, in the meantime, might do almost anything, and the remitting banker might, at the end of thirty or forty-five days, find himself with a balance abroad on which he could sell his checks only at very low rates.

To protect himself in such case the banker would, at the time he sent over the commercial exchange, sell his own demand drafts for future delivery. Suppose that he had sent over £25,000 of commercial "payment" bills. Unable to tell exactly when the proceeds would become available, the banker buying the bills would, nevertheless, presumably have had experience with bills of the same name before, and would be able to form a pretty accurate estimate as to when the drawees would be likely to "take them up" under rebate. It would be reasonably

safe, for instance, for the banker to sell futures as follows: £5,000 deliverable in fifteen days; £10,000 deliverable in thirty days, £10,000 deliverable in from forty-five to sixty days. Such drafts on being presented could in all probability be taken care of out of the pre-payments on the commercial bills.

By figuring with judgment, foreign exchange bankers are often able to make substantial profits on operations of this kind. An exchange broker comes in and offers a banker here a lot of good "payment" commercial bills. The banker finds that he can sell his own draft for delivery at about the time the commercial drafts are apt to be paid under rebate, at a price which means a good net profit. The operation ties up capital, it is true, but is practically without risk. Not infrequently good commercial "payment" bills can be bought at such a price and bankers' futures sold against them at such a price that there is a substantial profit to be made.

The other operation is the sale of bankers' futures, not against remittances of actual commercial exchange but against exporters' futures. Exporters of merchandise frequently quote prices to customers abroad for shipment to be made in some following month, to establish which fixed price the exporter has to fix a rate of exchange definitely with some banker. "I am going to ship so-and-so so many tubs of lard next May," says the exporter to the banker, "the drafts against them will amount to so-and-so-much. What rate will you pay me for them—delivery next May?" The banker knows he can sell his own draft for May delivery at, say, 4.87. He bids the exporter 4.86½ for his lard bills, and gets the contract. Without any risk and without tying up a dollar of capital the banker has made one-half cent per pound sterling on the whole amount of the shipment. In May, the lard bills will come in to him, and he will pay for them at a rate of 4.86½, turning around and delivering his own draft against 4.87.

Selling futures against futures is not the easiest form of foreign exchange business to put through, but when a house has a large number of commercial exporters among its clients there are generally to be found among them some who want to sell

their exchange for future delivery. As to the buyer of the banker's "future," such a buyer might be, for instance, another banker who had sold finance-bills and wanted to limit the cost of "covering" them.

The foregoing examples of dealing in futures are merely examples of how futures may figure in every-day exchange transactions. Like operations in exchange arbitrage, there is no limit to the number of kinds of business in which "futures" may figure. They are a much abused institution, but are a vital factor in modern methods of transacting foreign exchange business.

27. *Arbitraging in exchange.*—This is another important part of the activity of the foreign department. Arbitraging may best be described as the purchasing of exchange on one country through another country. Conditions often arise, for instance, which make it cost less dollars to send a given number of francs to Paris by buying them in London, with a sterling bill, than to buy them here in New York. Even very slight advantages gained in this way may amount to considerable profit on a large volume of transactions.

28. *Arbitraging illustrated.*—To illustrate with a concrete case: Suppose a banker in New York sells a 25,250 franc draft on Paris, at the rate of 5.17½ (5 francs, 17½ centimes to the dollar). That means that he realizes from its sale $4,879.23. Making up his mind to cover through London, he finds that the check-rate on London is 4.84, which means that he can buy a £1,000 draft on London for $4,840. Cabling to London, he finds that the rate there on Paris is 25.25 (£1 = fcs. 25.25) and that £1,000 will therefore exactly buy the francs, 25,250, he needs. He goes ahead, therefore, and pays out $4,840 for the £1,000 draft on London, sends it to London with instructions to his correspondent to buy with it francs 25,250, and directs that these

francs be sent to Paris to the credit of his account. On the other side the transaction just matches off—he drew francs 25,250 on Paris and he has deposited there exactly the same amount. But on this end he is ahead. He took in $4,879.23 originally and has spent only $4,840.

29. *Arbitraging operations.*—This is of course only the simplest form of arbitrage but it is typical of transactions being continually made. A recent article in the *New York Financier* says:

In conducting such operations it is essential that the banker shall be advised, through the cable, of the varying conditions of the markets abroad. In such markets as Paris and London, where the exchange transactions are always large, rates often fluctuate sharply and conditions change frequently. Consequently, though the situation may be favorable one day it may suddenly become adverse, necessitating some modification of the method of arbitraging. Moreover it frequently happens that after a successful negotiation has been effected by a banker as the result of private information, his competitors may be advised of the favorable conditions prevailing and they also may draw in a similar manner. Hence each operator seeks to obtain for himself alone all possible information regarding changes which are likely to affect his business. Sometimes a banker may find, upon calculation, that it will be profitable to conduct arbitraging of exchange between three or more points; in such cases the conditions at each of the points must first be ascertained and calculations have to be made with the utmost care. Occasionally in drawing bills the banker, in order to take advantage of abitraging operations, will transfer credits, through the cable, from an adverse center to a point favorable for his purpose. Indeed there are very many ways by which arbitraging can be profitably conducted by bankers having the requisite facilities and the necessary skill for such operations. It will be observed that operations in arbitraging of exchange require the

services of men of the largest experience, and hence the business can be conducted to advantage only in the most thoroughly equipped offices. The exchange student who enjoys opportunities for practice in such offices and has the determination to qualify himself for this branch of exchange work by acquiring a knowledge of all of its intricate details will have no difficulty after such qualification in securing advancement. The field for operations in arbitraging of exchange is continually and rapidly broadening, and there will probably always be a demand for the services of men capable of taking positions as managers of exchange houses or departments.

APPLICATION FOR COMMERCIAL CREDIT

New York,.....

GUARANTY TRUST COMPANY OF NEW YORK.

Dear Sirs.

Please issue for our account a Documentary

Credit in favor of

.....

for £.....*drafts at*.....

against.....*cost of shipment of*.....

from.....*to*.....

In force until first day of.....

Insurance effected in.....

Kindly advise the Credit by CABLE / MAIL.

Yours truly,

APPLICATION FOR CIRCULAR LETTER OF CREDIT

New York,.....

Guaranty Trust Company of New York,

28 *Nassau Street,*

(*Mutual Life Building*).

Dear Sirs:

Please issue your Circular Letter of Credit

£.....

for *to read in favor*

$.....

of .....

or .....

and to remain in force for.....*months from date of issue. At foot we affix specimen signatures.*

Yours truly.

.....

.....

.....

CHAPTER III

FOREIGN EXCHANGE AND IMPORTS

30. *Commercial credits.—The financing of exports and imports.*—During the past ten years there has grown up a system of interrelation between the import houses and the bankers which is entirely different from anything that has ever been seen before. Due, probably, to our territorial expansion and the great gain in our foreign commerce, there has been an enormous increase in the amount of banking capital used in mercantile business and a corresponding cementing of the ties between the merchant and the banker.

Twenty years ago the financing of imports and exports at any given commercial center was concentrated in the hands of two or three bankers who understood the business and made a specialty of it. To-day there is hardly a leading banking house which does not engage in foreign exchange business and hardly a foreign exchange manager who is not doing some sort of a commercial letter of credit business. At a point like New York, for instance, there has been a complete change within ten years in the personnel of the banking fraternity which is backing the operations of the import and export houses. The private banker has given way entirely to the institution. Even the trust companies are engaging in this business on a large scale.

Commercial credit business has come to play so important a part in the operation of the up-to-date bank, and is so little understood even by many of those well

Credit No..... *(Copy)*
£.....Sterling

GUARANTY TRUST COMPANY OF NEW YORK

New York,.....191...

To the GUARANTY TRUST COMPANY OF NEW YORK,
33 LOMBARD STREET,
LONDON.

Gentlemen:

At the request and for account of.....
we hereby authorize.....
or any other parties whose drafts you may be directed by.....*written order, or by us, to accept under this credit, to value on you at*.....*for any sum or sums not exceeding in all*.....
Pounds Sterling (say £.....Sterling) to be used as..... may direct for.....invoice cost of.....
to be purchased for account of.....
and to be shipped to a.....port in the United States.....
The Bills must be drawn in.....
.....*prior to the first day of*.....
and advice thereof given to you in original and duplicate, such advice to be accompanied by Bill of Lading filled up to order of the Guaranty Trust Company of New York (with copy of invoice) for the property shipped as above.

All the Bills of Lading issued, except one sent to us by the vessel carrying the cargo, and one retained by the captain of the said vessel, are to be forwarded direct to you. Copy of invoice, properly certified by the U. S. Consul to be forwarded to us by the vessel, also advice of each Bill drawn.

And we hereby agree with the drawers, endorsers, and bona fide holders of Bills drawn under and in compliance with this credit, that the same shall be duly honored on presentation at your office in London.

We are, Gentlemen,
Your obedient servants,
Guaranty Trust Company of New York,
by

.....

.....
Manager.

N. B. Bills drawn under this credit must be marked Drawn under Guaranty Trust Company of New York Letter of Credit No.....dated.....
for £.....
Insurance in order at.....

New York,.....191.

To the

GUARANTY TRUST COMPANY OF NEW YORK

Gentlemen:

Having received from you the Letter of Credit of which a true copy is on the other side, $\frac{I}{we}$ *hereby agree to its terms, and in consideration thereof* $\frac{I}{we}$ *agree with you to provide in New York, twelve days previous to the Maturity of the Bills drawn in virtue thereof, sufficient funds in cash, or in Bills on London, satisfactory to you, at not exceeding sixty days' sight, and endorsed by* $\frac{me}{us}$*, to meet the payment of the same with.....per cent. commission and interest as hereinafter provided, and* $\frac{I}{we}$ *undertake to insure at* $\frac{my}{our}$ *expense, for your benefit, against risk of Fire or Sea, all property purchased or shipped pursuant to said Letter of Credit, in Companies satisfactory to you.*

$\frac{I}{we}$ *agree that the title to all property which shall be purchased or shipped under the said credit, the bills of lading thereof, the policies of insurance thereon and the whole of the proceeds thereof, shall be and remain in you until the payment of the bills referred to and of all sums that may be due or that may become due on said bills or otherwise, and until the payment of any and all other indebtedness and liability now existing or now or hereafter created or incurred by* $\frac{me}{us}$ *to you on any and all other transactions now or hereafter had with you, with authority to take possession of the same and to dispose thereof at your discretion for your reimbursement as aforesaid, at public or private sale, without demand or notice, and to charge all expenses, including commission for sale and guarantee.*

Should the market value of said merchandise in New York, either before or after its arrival, fall so that the net proceeds thereof (all expenses, freight, duties, etc., being deducted) would be insufficient to cover your advances there against with commission and interest, $\frac{I}{we}$ *further agree to give you on demand any further security you may require, and in default thereof you shall be entitled to sell said merchandise forthwith, or to sell "to arrive," irrespective of the maturity of the acceptances under this Credit,* $\frac{I}{we}$ *being held responsible to you for any deficit, which* $\frac{I}{we}$ *bind and oblige* $\frac{myself}{ourselves}$ *to pay you in cash on demand.*

It is understood that in all payments made by $\frac{me}{us}$ *to you in the United States*

the Pound Sterling shall be calculated at the current rate of exchange for Bankers Bills in New York on London, existing at the time of settlement, and that interest shall be charged at the rate of five per cent. per annum, or at the current Bank of England rate in London if above five per cent.

Should $\frac{I}{we}$ *anticipate the payment of any portion of the amount payable, interest is to be allowed at a rate one per cent. under the current Bank of England rate.*

In case $\frac{I}{we}$ *should hereafter desire to have this credit confirmed, altered or extended by cable (which will be at* $\frac{my}{our}$ *expense and risk),* $\frac{I}{we}$ *hereby agree to hold you harmless and free from responsibility from errors in cabling, whether on the part of yourselves or your Agents, here or elsewhere, or on the part of the cable companies.*

This obligation is to continue in force, and to be applicable to all transactions, notwithstanding any change in the composition of the firm or firms, parties to this contract or in the user of this credit, whether such change shall arise from the accession of one or more new partners, or from the death or secession of any partner or partners.

It is understood and agreed that if the documents representing the property for which the said Credit has been issued are surrendered under a trust receipt, collateral security satisfactory to the Company, such as stocks, bonds, warehouse receipts or other security, shall be given to the Company, to be held until the terms of the credit have been fully satisfied and subject in every respect to the conditions of this agreement.

It is further understood and agreed in the event of any suspension, or failure, or assignment for the benefit of creditors on $\frac{my}{our}$ *part, or of the nonpayment at maturity of any acceptance made by* $\frac{me}{us}$*, or of the nonfulfillment of any obligation under said credit or under any other credit issued by the Guaranty Trust Company of New York on* $\frac{my}{our}$ *account, or of any indebtedness or liability on* $\frac{my}{our}$ *part to you, all obligations, acceptances, indebtedness and liabilities whatsoever shall thereupon, at your option then or thereafter exercised, without notice, mature and become due and payable.*

informed in most other departments of banking, that it is well worth while to pause and look carefully into the principles on which the business is grounded. A description of all the various forms in which it is being worked would require a volume in itself; but there is one main operation around which the system is built, a clear understanding of which will make it easily possible to grasp the more complicated forms of the business.

31. *Commercial credit finance illustrated.*—Take the commercial credit business as it applies to the import of merchandise, say, from the Far East to New York. Suppose a New York house to have bought a hundred cases of bristles in China, How can the transaction be financed and the payment effected? On closing the contracts for the bristles by cable, the first thing the importer would do would be to go to his banker and get him to issue a commercial letter of credit to fit the terms of the contract. Such a letter of credit would be addressed to some bank in London and would authorize that bank to "accept" the four months' sight draft of the sellers of the bristles in China, up to a certain amount and under certain conditions. These conditions, having to do with the attaching to the drafts of the bills of lading, insurance certificates, etc., are all set forth in the credit.

The banker in London having been duly advised of the credit on him that has been issued, the letter of credit itself would be sent out to the seller of the goods in China. The latter would then go ahead with the shipment. First, the bristles would be insured and a certificate to that effect received from the insurance company. Next they would be put aboard ship and a certificate to that effect (bill of lading) received from the steamship company. Having these documents in his

possession the seller of the bristles would next draw a bill of exchange, in pounds, on the London bank mentioned in the credit, the draft being at four months' sight or six months' sight, as set forth in the credit. To this draft he would pin the bill of lading and the insurance certificate, and then, taking the letter of credit with him, he would go to the local bank to sell the draft, get his money, and thus close the whole transaction so far as he is concerned.

32. *Part London plays.*—Just at this point should be mentioned the reason why London was brought into the transaction at all—why, in fact, the seller of the goods did not draw direct upon the buyer in New York. The explanation is simply this: in the first place, because a draft drawn on some small New York mercantile house would not be readily negotiable out in China; in the second place, because a draft in dollars drawn on a banker in New York, no matter how good its standing, would be but little better by reason of there being no market in the United States in which such drafts can be discounted.

Having drawn his sterling draft for the full value of the merchandise, the seller of the goods takes the draft to his bank, shows the letter of credit which gives him the authority to draw, and turns it into local money. The bank is glad enough to take the draft. Exchange on London is always in demand and most of the local banks' business consists in buying bills of exchange just of this kind. So the shipper of the merchandise takes his money, and is finished with the transaction.

At this point in the operation the merchandise has been sent off on a slow steamer to New York and the bill of lading and the four months' sight draft on London, representing the value of the goods, is in the hands

of the local bank. The latter now loses no time in sending off this draft (pinned to it is the bill of lading) to London, in order that the draft may be "accepted" by the bank on which it is drawn.

For the sake of clearness suppose the draft to be drawn on the London City and Midland Bank. A month passes, and one day the draft is presented for "acceptance." Detaching from the draft the bill of lading and the insurance certificate, the cashier of the London City and Midland Bank writes across the face of the draft, "Accepted, Payable June 23." He gives the draft back to the man who brought it in. He keeps the bill of lading and the insurance certificate. June 23d is four months off. The accepted bill of exchange may be discounted and rediscounted a dozen times between now and then, but the cashier of the London City and Midland Bank has no interest in what happens to the bill or where it goes. All he knows is that in exactly four months that bill of exchange will fall due, and, coming out of somewhere, will be presented at his wicket for payment.

33. *Value of implicit trust.*—Meantime the slow freighter is steadily carrying the goods toward New York, and as it is impossible for anyone to get them out of the ship without the bill of lading, the cashier of the London City and Midland Bank loses no time in sending the bill of lading to his banking correspondent in New York who originally issued the credit. From this time on the London banker is unprotected. He has put his name on a bill which obligates him to pay it in four months; and relying solely on the good faith and solvency of his New York correspondent has sent the shipping documents to him. In a business which involves such an operation as this it may be readily imag-

ined how intimate the relations must be between the bank that issues the credits in New York and the bank in London on which they are issued. No bank in London would ever agree to "accept" bills unless it has the most implicit trust in its New York correspondent and was sure that before the four months were up and the bill came due the necessary remittance would arrive from New York.

Before going on with the transaction and seeing how the goods arrive in New York and are finally delivered into the hands of the buyer, it is worth while to note what the usual relations are between the issuer of a commercial credit and the bank in Europe on which the credit is drawn. Very often it happens that a New York bank issues credits on its own branch in London, as for instance the Guaranty Trust Company of New York on its London office. Then again a great deal of the business is transacted on joint account both as to risk and commission realized—in which case the relationship has to be very close. Lastly, credits are issued strictly for a consideration—that is to say, the banking house of John Jones and Company in London being satisfied that the banking house of John Smith and Company in New York is all right, agrees, for a stipulated commission, to "accept" drafts drawn under John Smith and Company's credits up to a certain amount. Any good bank in the United States can easily make such arrangements.

34. *Banker's only security.*—Going back now to the typical transaction whose course we have been following, let us assume that the bristles have arrived in New York and that the bill of lading has been received by the New York banker who issued the credit, together with advice from his London correspondent of the

TRUST RECEIPT.

(FOR DELIVERY TO PURCHASER.)

RECEIVED from the GUARANTY TRUST CO. OF NEW YORK the following goods and merchandise, their property, specified in the Bill of Lading per....., dated..... marked and numbered as follows:

The said goods while in { my / ..... / our } hands shall be fully insured against loss by fire.

In trust to deliver the same to..... who have purchased the same for..... payable in..... and to obtain from the purchaser the proceeds of the sale of the same.

In consideration of the delivery of said goods to { me / .... / us } in trust as above, { I / .... / we } agree to deliver them immediately to the said purchasers and to collect the proceeds of sale, and immediately deliver such proceeds to the GUARANTY TRUST CO. OF NEW YORK in whatever form collected, to be applied by them against the acceptances of the GUARANTY TRUST CO. OF NEW YORK on { my / ..... / our } account, under the terms of Letter of Credit No.....issued for { my / ..... / our } account, and to the payment of any other indebtedness of { mine / ..... / ours } to the GUARANTY TRUST CO. OF NEW YORK CITY, N. Y.

It is understood, however, that if such proceeds be in notes or bills receivable, they shall not be so applied until paid, but with liberty meanwhile to the GUARANTY TRUST CO. OF NEW YORK to sell or discount, and so apply net proceeds.

The GUARANTY TRUST CO. OF NEW YORK may at any time cancel this trust, and they may take possession of said goods until the same have been delivered to said purchasers and the proceeds of sale received from them, and thereafter of such proceeds, wherever the said goods and proceeds may then be found, and in the event of any suspension or failure or assignment for the benefit of creditors on { my / ..... / our } part or of the non-fulfillment of any obligation or of the non-payment at maturity of any acceptance made by { me / ..... / us } under said credit, or any other credit issued by the GUARANTY TRUST CO. OF NEW YORK on { my / ..... / our } account, or of any indebtedness on { my / ..... / our } part to them, all obligations, acceptances, indebtedness, and liabilities whatsoever shall thereupon (with or without notice) mature and become due and payable.

Dated.....191

.....

..... 26990

TRUST RECEIPT.

RECEIVED from the GUARANTY TRUST CO. OF NEW YORK the following goods and merchandise, their property, specified in the Bill of Lading per S. S.....Dated..... marked and numbered as follows:

and, in consideration thereof, { I / we } HEREBY AGREE TO HOLD SAID GOODS IN TRUST for them, and as their property, with liberty to sell the same for their account, and further agree, in case of sale to hand the proceeds to them to apply against the acceptances of the GUARANTY TRUST CO. OF NEW YORK on { my / our } account, under the terms of the Letter of Credit No.....issued for { my / our } account and for the payment of any other indebtedness of { mine / ours } to the GUARANTY TRUST CO. OF NEW YORK.

The GUARANTY TRUST CO. OF NEW YORK may at any time cancel this trust and take possession of said goods, or of the proceeds of such of the same as may then have been sold, wherever the said goods or proceeds may then be found and in the event of any suspension, or failure, or assignment for the benefit of creditors, on { my / our } part, or of the non-fulfillment of any obligation, or of the non-payment at maturity of any acceptance made by { me / us } under said credit, or under any other credit issued by the GUARANTY TRUST CO. OF NEW YORK on { my / our } account or of any indebtedness on { my / our } part to them, all obligations, acceptances, indebtedness and liabilities whatsoever shall thereupon (with or without notice) mature and become due and payable. The said goods while in { my / our } hands shall be fully insured against loss by fire.

Dated, New York City,.....191

(Signed).....

£.....Stg.

TRUST RECEIPT.

(DOCUMENTS FOR WAREHOUSING.)

RECEIVED from the GUARANTY TRUST CO. OF NEW YORK Bill of Lading per.....dated..... for the following goods and merchandise, their property, marked and numbered as follows:

imported under the terms of Letter of Credit No....., issued by them for { my / our } account, the said Bill of Lading to be used by { me / us } for the sole purpose of entering the above described property at the United States Custom House at the Port of....., and of storing the same in the name, and as the property, of the said the GUARANTY TRUST CO. OF NEW YORK, and subject only to their order, { I / we } hereby agreeing to so store the said property and to hand the storage receipt for the same to the said the GUARANTY TRUST CO. OF NEW YORK, when obtained.

{ I / We } ALSO AGREE to fully insure said property against fire, the loss, if any, payable to said the GUARANTY TRUST CO. OF NEW YORK, and to hand to them the policies of insurance thereon.

Dated.....191

(Signed).....

£.....

amount of the draft drawn and its maturity. The next step is to put the bristles into the importer's possession. But by doing so, the banker is doing nothing less than handing over the only security he has. How can he let the importer have the bristles and still remain protected himself?

He cannot, unless the "trust receipt" he receives when he gives up the bill of lading to the importer can be called protection. The "trust receipt" is simply a paper signed by the importer stating that he has received the merchandise and that he will sell the same and apply the proceeds toward paying off the four months' sight draft before or at maturity. Most trust receipts specify that the merchandise is to be kept separate, earmarked as it were, and that the proceeds are to be kept strictly distinct from the firm's other assets and handed over to the banker as the bristles are sold.

Having the actual merchandise in his hands, the importer is now in a position to sell it and begin to make pre-payments to the banker who issued him the credit. As these are received by the banker he sends them to the London bank which holds them against the maturity of the bill it accepted. Presumably, before the four months are up, the bristles will all have been sold and enough money out of the proceeds remitted to London to cover the whole amount of the maturing draft. What is left constitutes the importer's profit.

35. *Benefits to importer.*—It has been worth while to set down the whole practical course of one of these typical commercial credit operations in order that there may be no confusion in dealing with the theoretical side—the reason why the various parties go into such transactions and the benefits each gets out of it. Take first the importer. It is all a matter of credit with him; if

he can get a banker to give him a commercial letter of credit, he can bring in any quantity of merchandise, have anywhere up to four months to sell it in, and never have to put up a dollar of his own money. All it costs him is a commission on the amount of the drafts drawn.

The regular commission is one-quarter per cent for each thirty days of the life of the draft drawn. Thus, if the drafts are drawn at sixty days' sight, the merchant pays a commission of two times one-quarter per cent, which equals one-half per cent. If the draft runs four months, or 120 days, the commission would be four times one-quarter per cent, which equals one per cent. This is the *regular* commission. As may be imagined, it is changed in all sorts of ways as a matter of individual negotiation. On coffee credits there are several banks in New York now doing the business at three-eighths per cent for ninety days' sight drafts—which is exactly one-half the regular commission. So keen is the competition that there is one large bank which is doing six months' business at only one-half per cent. Such business is ruinous, a commission of that kind being no fair compensation for the risk taken.

86. *Benefits to exporter.*—So much for what the importer gets out of the transaction. How about the exporter in China? As has been shown, he has been able to make a sale on a four months' credit, and to get his money without a day's delay and put himself in shape for the next transaction. Of course, when he took his four months' sight sterling draft to his banker to sell he did not get as high a rate of exchange as if he had had a sight draft to sell, the difference representing the discount. But that was allowed for in the price he originally quoted for the goods. What counts with

him is that he has made the sale, has received his money, and is ready for the next transaction.

37. *Banker's commission.*—As for the two bankers, one in New York and one in London, their part in the transaction has been influenced simply by the desire to make a commission. Both of them took a certain risk, to be sure, but credits of this kind are never issued except to entirely trustworthy parties. And as a matter of fact neither banker has had to put up any real money. The one in New York has had to stand responsible for the importer to whom he issued the credit, and the one in London has had to obligate himself by "accepting" the drafts—putting his name on commercial paper—but no one has had to advance any actual money. The real money that the shipper in China received was based entirely on the *credit of* the banks concerned in the operation.

For which reason it appears that as long as a bank here can get a bank in London to "accept" drafts drawn under the American bank's letters of credit, there is almost no limit to the volume of business it can do. And even a small rate of commission will return big profits. There are a number of banks and bankers doing business in New York for whom their foreign correspondents regularly keep running acceptances amounting to $5,000,000. A fair average net profit to the bank issuing the credit would be called ¼ per cent, turned over four times a year, so that a bank with $5,000,000 of acceptances constantly running abroad would stand to make, say, $50,000 a year in commissions without having put up a dollar of capital.

A book might be written on the various forms of commercial credit business being transacted but it would

BAILEE RECEIPT.

RECEIVED *from the* GUARANTEE TRUST COMPANY OF NEW YORK

.....

.....

and.....*hereby undertake to sell the property therein specified, for account of the said Company, and collect the proceeds of the sale or sales thereof, and deposit the same immediately on receipt thereof in the said Company, at*

.....*to the credit of*.....

hereby acknowledging.....*to be Bailee*..... .....

of the said property for the said Company.

If the above are not sold and the proceeds so deposited within ten days from this date,.....*undertake to return all documents at once on demand, or to pay the value of the goods, at the Company's option*

Dated at.....*the*.....

.....

The said goods while in { my / our } hands shall be fully insured against loss by fire.

BAILEE RECEIPT.

RECEIPT *from the* GUARANTY TRUST COMPANY OF NEW YORK, *solely for the purpose of selling same for account of said Company:*

.....

.....

marked and numbered.....

and.....*hereby undertake to sell the property herein specified, for account of the said Company, and collect the proceeds of the sale or sales thereof, and deliver the same immediately on receipt thereof to the said Company, to be applied to the credit of*.....

hereby acknowledging.....*to be Bailee of the said property for the said Company, and*.....

.....*do hereby assign and transfer to the said Company the accounts of the purchaser or purchasers of said property to the extent of the purchase price thereof, of which fact notice shall be given at the time of delivery of the said property by*.....*to such purchaser or purchasers and all invoices therefor shall have imprinted, written or stamped thereon by*.....*the following:*

"Transferred and payable to
GUARANTY TRUST COMPANY OF NEW YORK,

NASSAU AND CEDAR STREETS, NEW YORK."

If the said property is not sold and the proceeds so deposited within ten days from this date,*.....*undertake to return all documents at once on demand, or to pay the value of the goods, at the Company's option.

Dated at.....*the*.....191

.....

The terms of this receipt and agreement shall continue and apply to the merchandise above referred to whether or not control of the same, or any part thereof, be at any time restored to the Guaranty Trust Company of New York, and subsequently delivered to us.

The said goods while in { my / our } hands shall be fully insured against loss by fire.

be only a more detailed description of operations whose theory is the same as the one I have attempted to outline. Whether the merchandise in question is bristles and comes from China, or whether it is coffee and comes from Brazil, makes little difference so far as the banking end of the transaction is concerned. Nor does it make any difference if the article happens to be silk or dry goods imported from France, or if the credit directs that the drafts shall be drawn in francs on some bank in Paris instead of pounds on some bank in London. All these are ramifications of the same thing. They all come back to the one central idea that the banker turns over not his money but his *credit* to the importer, enabling the importer to do safely a very much larger amount of business than he could do on his own limited capital.

38. *An aid to business.*—Through the utilization of commercial letters of credit, indeed, more than one small firm has remarkably built up its business. The writer happens personally to know of the case of a small importing firm, which, as the result of the commercial credits extended to it by a big trust company, became a strong concern within the space of only a very few years. Had the men at the head of this firm not been able to convince the bankers of their ability and integrity, they would never have been able to obtain the credits and must have been content with much slower progress. But, on the other hand, had there been no such system existent, no amount of ability could have built up the business in so short a time.

39. *Growth of commercial credit and facilities.*—Owing to the large number of bankers now engaged in commercial credit business and the fact that even the big banks are willing to open little credits of £100

to £200, the use of these facilities by importers has become very general. It is a common thing for a bank to grant an importer with resources of $100,000 a letter of credit for £20,000, thus enabling him to double his business. And it is to this that the great increase in our foreign trade during the past ten years is undoubtedly due. Where importing is made so easy there will be plenty of people who want to engage in it.

What influence does this mass of credit exert on the stability of the commercial structure? Is there any ground for the mistrust of the old-line importer who thinks that the merchant should use his own capital and not the banker's? Very little—that was shown beyond doubt by the panic of 1907 and the bad times which followed. Failures among importers occurred but they were comparatively few—certainly nothing like what was feared. Bankers lost some money on commercial credits during that time but the amount was not very great. The merchandise imported by any but the strongest houses is usually all sold before the letter of credit is even applied for; and so, as long as the importer is honest, the banker takes little risk of not getting his money.

The commercial credit business as it has developed during the past few years has, in fact, become an integral part of our banking system and is growing more and more important all the time. It is a development, indeed, which is a long step toward the bringing about of those ideal relations between the banker and the business man which tend to use the accumulated savings of the country, not for speculation but for carrying on the country's legitimate business.

CHAPTER IV

FOREIGN EXCHANGE AND EXPORTS

40. *Foreign exchange and exports.*—Lack of understanding, on the part of merchants and manufacturers, of how goods sold by one country to another are paid for has always acted as a certain drag on American export trade. A manufacturer out in Chicago has sold a bill of goods to a firm in St. Louis—he knows all about how payment will be made for the goods, how to pack them, and how to send them off. But in the case of an order coming from abroad it is often different. If he has not had much experience in exporting, the method by which he will get his money is not apt to be well understood by him. He has a vague idea, probably, that there is a foreign exchange operation involved in the payment for the goods, but to him foreign exchange has always been a mystery, about which he has known nothing. The mere phrase, indeed, suggests a series of complicated calculations in which he is apt to get himself involved if he begins trading with some outside country. He knows that it would be a good thing to start doing business with the outside market, but not understanding the ins and outs of how to handle the business in its financial as well as its selling aspects, he is apt to pass the whole thing by with the reflection that it is safer to stick to the domestic market.

It is quite true that there is an operation in foreign exchange involved in all shipments of merchandise from one country to another, but it is by no means true that

it is necessary for the exporter to understand all about foreign exchange in order to do a successful export business. The amount of foreign exchange knowledge required by the average exporter of goods is, indeed, slight, and in the case of the shipment of a great many domestic products the exporter has absolutely nothing to do with the foreign exchange end of the transaction at all. Where it has been arranged that the seller of the goods in this country is to draw a draft in foreign currency on the buyer of the goods in some other country, it may be necessary to know something about foreign exchange in order to dispose of the drafts to the best possible advantage, but where the shipment is being worked under a credit opened in dollars with some New York banking house, the exporter in this country has simply a dollar transaction on his hands and nothing else.

41. *Financing exports by means of dollar credits.*— Let us consider the case of a manufacturer whose advertisement has been seen by a buyer of merchandise in some foreign country—and, it may be said, incidentally, that the advertisements in American periodicals are eagerly read abroad. A letter comes from the foreign house making inquiry about the goods which have been noticed. The house here looks up the standing of the writer and finds that the house on the other side is in good standing, or, if not particularly strong, yet enjoys fair credit. A price is agreed upon and a sale made. But the house here does not like the idea of drawing a draft in marks direct on the house abroad, which, we will say, is located in Berlin. The Berlin house is not a particularly prominent one, and the exporter here realizes that were he to draw a draft in marks it might not be the easiest thing in the world to

get someone to take this draft off his hands and give him dollars for it. Besides that, he may not have had experience in drawing drafts of this kind and in forwarding the necessary documents. Taking it altogether, therefore, he decides that he would rather arrange payment in some other way than by drawing direct on the buyer in Berlin, and so writes over to the buyer asking him to open a credit in dollars with some first-rate New York house. "We should prefer," is the gist of what he writes, "that you would arrange so that we can draw in dollars upon some house in New York, in order that we may not have to negotiate a foreign draft."

The operation of opening up such a credit is about as follows: The buyer in Berlin goes to a bank there, which has close commercial connections with America, and asks that bank to open up for him a dollar-credit in New York. In its willingness to do this the foreign bank is guided entirely by the standing of the firm which makes the request and by the profit (commission) which the business offers. If the bank considers the business desirable, it will agree with the Berlin importing house to open up the dollar credit for the American exporter with its New York banking correspondent. The terms having been arranged, the Berlin banking house writes or cables to its correspondent in New York, asking the correspondent there to open a credit for so-and-so many dollars in favor of such-and-such a firm of manufacturers located, say, in Chicago. In this credit there are set forth the terms on which the Chicago firm is to be allowed to draw upon New York, the various documents which are to accompany the drafts, etc.

Credits of this kind vary, of course, according to the requirements of the foreign importer and the deal which he has made with the exporter in the United States.

The details are all arranged between buyer and seller. After they have been agreed upon the buyer abroad goes to his bank and specifies the kind of a credit he wants opened. Sometimes these credits call for payment by the New York banking house of the cost of insurance and freight. Sometimes that is paid for in Germany. Again, in the case of a manufacturing firm in the United States located in a small town, where it is impossible to get through-bills of lading, it may be stipulated in the credit that the New York banking house or some custom-house broker in New York is to arrange for the exchanging of the local bills of lading into through-bills of lading. All that is merely a matter of detail. In each particular transaction it is simply a question of these points being settled direct between buyer and seller.

42. *How the exporter gets his money.*—The manufacturer having been notified that a credit of this kind has been opened, draws his draft in dollars on the New York bank, puts it through his local bank and is out of the transaction. Very likely the local bank will not actually credit his account until the draft has gone to New York and been paid. That, however, is usually only a matter of a few days. When the operation has been brought to the point that the manufacturer can draw a draft in dollars upon some first-class New York banking house, he can pretty well regard himself as having been paid for the merchandise he has shipped.

The New York banking house, having paid the draft of the exporter and taken over the documents, forwards them to its banking correspondent in Berlin. The latter receives these documents and holds them at the disposition of the party who opened the credit. As to the terms under which these documents will be turned over

to the German importer, everything depends upon the financial standing of the latter. If it is a strong house with good credit the chances are that the Berlin bank will turn over the documents at once, even though the commercial firm may not have made final payment. If, on the other hand, the bank decides that greater care is necessary, it may parcel out the merchandise specified in the documents as payments on the amount due are made. All this, however, concerns the American exporter not in the least. It is simply a matter of the terms which the foreign buyer has been able to make with his local bank.

43. *The question of commission.*—Many an exporter who is doing, and for some time has done, a satisfactory export business knows nothing whatever about these transactions between the buyer on the other side and his bank, nor is knowledge on this subject necessary except as it may throw further light upon the willingness or unwillingness of foreign importers to open up credits in this country. Not for nothing, of course, does either the bank in Berlin or the bank in New York go into the transaction. Both of them expect to get a commission out of the business, and that commission has to come out of the importing firm abroad, which opens the credit. No hard-and-fast rule can be given as to what this commission amounts to. That is covered entirely by the terms of the credit. In a general way, however, it can be said that the longer the credit extended to the German importer by his local bank the more will be charged, and that the commission received by the German bank will be pretty evenly split up between itself and its American banking correspondent.

44. *Drafts direct on the importer.*—From the standpoint of the American exporter a credit of this sort is

an exceedingly favorable arrangement. He has, of course, no commission to pay. He is not involved in any foreign exchange operation. When he gets ready to ship the goods he can simply draw his draft in dollars on New York, attach the documents and get his money practically at once. All of which is very convenient for the American exporter—more so than it is for the German importing house, which has to pay the commission. In a good many cases, therefore, the foreign house does not care about arranging a credit of this sort. A sale has been made. "Draw upon us in marks for the invoice amount," writes the foreign house; "you will have no trouble in converting the draft into dollars."

Where the manufacturer here is located at a point possessing exchange facilities, and where the house on the other side is big enough and strong enough so that drafts drawn upon it can be readily sold in the foreign exchange market, for dollars, this way of doing business is all right. The seller of the goods here gets together his papers, draws his draft in marks, attaches them all together, and sells the whole to some dealer in exchange, at the rate for marks prevailing at that time. Some foreign exchange dealer, wanting to buy a draft in marks, gladly takes it off the exporter's hands, paying him dollars for it. In that way the exporter gets his money at once.

Not so very many years ago refusal on the part of foreign buyers to open credits in dollars used to result in a good deal of possible business with American manufacturers located in small towns not being done, but with the growth of the foreign exchange system throughout the country, it has come about that this is no longer the obstacle it used to be. A man out in Peoria, Ill., for example, has made a sale in some foreign country

and has arranged with the customer to draw upon him in foreign currency. There is nowadays not the slightest trouble in negotiating such a draft. Assuming even that the town is small, and that no bank there does a foreign exchange business, there are three ways in which the exporter can get his money.

45. *The three ways of negotiating the drafts.*—The first of these is to deposit the draft in his local bank with instructions to the local bank to send it along to its banking correspondent in New York, and have the New York correspondent sell the draft at the best possible rate of exchange. The draft, upon reaching New York, is disposed of in the exchange market at the current rate. The New York bank credits the proceeds to its inland correspondent and advises its inland correspondent that so-and-so many dollars have been placed to its credit. The inland bank thereupon notifies the exporter that his deposit account has been credited with that amount, less only the charge for collecting the draft.

The second way is for the exporter to arrange direct with some New York bank doing a foreign exchange business to have that bank take from him all the foreign exchange he may draw, at current prevailing rates. Having made a shipment and drawn a draft in a foreign currency, the exporter notifies the New York bank, and asks them to wire him the rate they can pay for it. Upon receiving the answer he converts the amount of the draft at the given rate into dollars, draws a dollar draft on the New York bank for the amount, attaches this dollar draft to the draft in the foreign currency and the documents, and puts the whole thing through his local bank in the regular course.

The third way in which exchange can be disposed of

is by arrangement with some dealer in New York or any other large foreign exchange center. These dealers make it a practice to handle exchange coming in from all over the United States, generally on a fixed commission basis. The arrangement is that the exporter inland is to notify the dealer whenever he has a draft for sale, upon which the dealer sells it to the bank making him the best bid. The dealer then notifies the drawer of the exchange as to what bank the bill has been sold to, and as to what the rate is. The exporter then, as in the second case, draws a dollar draft for the amount which the New York buyer of the exchange is willing to pay, attaches it to the bill of exchange itself, and puts it through his bank in the regular course. Ordinarily, his local bank will not credit him with the proceeds until the dollar draft has been collected in New York, but this is usually only a matter of a few days.

The following is from an article in the *American Exporter:*

Where only an occasional export transaction takes place, the first of these three methods is satisfactory enough, but where there are repeated transactions the second or third methods are far more satisfactory. In case a satisfactory arrangement can be made with some bank in New York to allow full rates of exchange for all bills sent to it, the second method is all right, but where much foreign exchange is drawn it is better practice for the exporter to work through a dealer. In that way he is enabled to have an agent at the New York end who will not simply credit him at what might be considered a "fair rate of exchange," but who will take the trouble to shop around and get the very best rate obtainable at the time. For this service it may be said most of the foreign exchange dealers in New York charge but a very moderate commission.

46. *The course of the draft.*—Whichever way the draft is disposed of, the exporter, when once dollars have been placed to his credit by his local bank, is out of the transaction—that, so far as he is concerned, ends it. He has, however, drawn a draft, and it is of more or less interest to him, though it does not directly concern the export operation, to know what happens to this draft. Let us assume that it is a sixty-day sight draft on London, and that the documents are to be delivered only upon payment of the same. Some New York foreign exchange banker buys this draft because he wants to add pounds sterling to his deposit account in London. He takes the draft and sends it to his banking correspondent in London, instructions accompanying not to deliver the documents until the draft is paid. Arrived on the other side, the draft is presented to the party on whom it is drawn. The net result of such a transaction is that the exporter here gets his money at once from some New York bank, while the New York bank has its London balance increased by a corresponding number of pounds sterling.

47. *Improvement in facilities.*—There are other ways, of course, in which goods exported can be paid for than by the opening of dollar credits and by the drawing of a draft upon the buyer abroad or some bank designated by him, but in the bulk of export transactions either one or the other of these two methods is employed. Where it is possible, as a rule, the American exporter prefers to have a dollar credit opened in New York or some other big city, on which he can draw. But with the spread of the foreign exchange system all over the country, the drawing of direct drafts has been greatly facilitated, and a large amount of business on this basis inaugurated. With the close connection now

existing between the inland banks and their New York correspondents there is really very little trouble about arranging the financing of export transactions. That there is nothing complicated about it, and that it is just about as easy for a house in Chicago to arrange payment for a bill of goods sold in London as for a bill of goods sold in St. Louis, is coming to be more and more generally recognized, and is one of the principal causes of the growth of the export business.

48. *Export letters of credit.*—With exports to countries where banking facilities are not well developed, it is not quite so easy. In the case of shipments to most South American countries, for example, the importer is not able to go to his bank and arrange a credit as was done by the Berlin banker in the case before referred to. In financing exports of this sort, therefore, a different system is necessary. It has come about, therefore, that there has been developed the system of what are known as "export letters of credit."

Commercial letters of credit for exports are issued in great variety of form, but all of them are designed to facilitate to the greatest possible extent payment for goods shipped to countries not having close banking relations with ourselves. A lot of agricultural machinery, we will say, has been sold in Buenos Aires. For the buyer down there to send up a draft drawn in dollars in payment is almost impossible—there is no good exchange market existing between New York and Buenos Aires, and there are times when it might be difficult to purchase drafts drawn in dollars on New York or on other American cities. The shipper here, on the other hand, does not want to wait for such a remittance, involving, as that would, a long delay and considerable loss of interest. To facilitate this business of shipments

from New York to South American points, therefore—to make possible the business, one might almost say—under present conditions, the intervention of a banker is necessary.

To the banker, therefore, the New York merchant who has sold the machinery in Buenos Aires goes and asks for an export letter of credit. "We have sold a lot of machinery down there," he says, "which will be paid for about thirty days after its arrival. In the meantime we do not want to be out of the money. Here are the bills of lading made over to yourselves, and here are the invoices and all the necessary papers. Give us a letter of credit so that we can get our money at once on this shipment and take up other business."

49. *How the credit works.*—To the banker this is an attractive proposition. A bona-fide trade has been put through; he has all the evidences of it in his own hands, the bills of lading, invoices, etc. He knows, moreover, that by the issue of an export letter of credit he can cause the exporter to get the money he wants without he himself, the banker, putting up any actual cash. If the exporter be allowed to draw a ninety-day draft on the New York banker's London correspondent, for instance, that draft can be sold for dollars in the New York exchange market and the exporter get the money he needs at once. This ninety-day draft drawn by the exporter will be "accepted" upon its arrival in London, but it will not have to be actually paid for ninety days. In the meantime the merchandise will have been sent to South America, will have been paid for, and the proceeds remitted to the London banker on whom the American exporter drew the ninety-day draft. No actual cash will have been put up by either banker engaged in the transaction.

There is a good commission in the business, and the New York banker proceeds to issue the export letter of credit desired. In this document the exporter of the machinery is authorized, under certain conditions, to draw his ninety-day sight draft in pounds sterling on the London banking correspondent of the banker here who issues the credit. The bills of lading and other documents, it is provided, are to be turned over to the banker who issues the credit so that they may be forwarded by him to his correspondent in Buenos Aires, who will attend to the collection of the money from the buyer of the merchandise in that place. This money, it is set forth, as it is collected, is to be remitted not back to New York but to the banker in London on whom the export credit gives the shipper here a right to draw.

Another form of export credit provides that instead of the exporter drawing his bills on London, the banker draws instead, turning over to the exporter the dollar proceeds of these drafts. There are some advantages to this method. The principal one is that, however well known the exporter may be, the banker's drafts will be salable at a slightly better rate of exchange than his own, and, therefore, that he will receive a great number of dollars from the same amount of pounds. Another advantage is that the exporter, who may very possibly not be familiar with the foreign exchange market, is saved the trouble of shopping around to get the best rate possible for the bills he wants to sell. The banker does all that for him, not infrequently taking the bills for his own account.

50. *A concrete example.*—How the system works is perhaps best illustrated by a concrete example. The shipment of machinery in question, we will say, is worth ten thousand dollars. The exporter gets his letter of

credit and draws a ninety-day draft on London for, say 1,800 pounds, that being ninety per cent. of the value of the shipment. This draft he sells in the New York foreign exchange market (the letter of credit being his authorization) and receives dollars therefor. That gives him his money and practically puts him out of the transaction. The documents he turns over to his banker, who sends them along to Buenos Aires. At the end of forty-five days, we will say, the South American banker has collected the whole ten thousand dollars. He then proceeds to remit this money to London, in sterling drafts. Before the ninety-day draft originally drawn matures, therefore, there will have been received in London sufficient funds to take care of it, and neither the accepting banker nor the banker who originally issued the credit will have had to put up any actual money. The amount received from Buenos Aires, indeed, will be considerably more than the amount of the draft drawn originally. This surplus, after deduction of charges, is remitted back to New York and then turned over by the New York banker to the party to whom he issued the letter of credit.

51. *Why the credit is issued on London.*—In connection with the above, several important considerations present themselves. In the first place, why is London brought into the transaction at all?—why cannot the operation be worked direct between New York and Buenos Aires? Answer to that is to be found in the fact that banking relations between ourselves and South America are not sufficiently close to maintain a foreign exchange market in which remittances and drawings can be advantageously made. Until recently national banks here have not been allowed to accept time-drafts. The Federal Reserve Act, however, as explained in

Chapter XVI of Part I, permits member banks of the federal reserve system to establish foreign branches and also permits them to accept long time drafts under certain restrictions. Immediately after the enactment of the Act some of the banks made plans to establish branches in South America. This and the ability to accept drafts should promote trade relations between the United States and South American countries.

Again, London is brought into the transaction because the New York banker issuing the credit does not want to put up any actual money and must have some foreign point on which he can allow his client to draw long bills. For such paper issued under a first-class letter of credit there is always an excellent market in New York. By the bringing of a third point, such as London or Paris, into the transaction, the banker here is able to loan his credit and keep his cash.

52. *The question of interest.*—A second important consideration concerns itself with the drawing of the ninety-day bills by the exporter. For drafts of that usance he gets, of course, a much lower rate of exchange than if these drafts were drawn at sight. When the remittances are made from Buenos Aires, on the other hand, they must be made in demand sterling. Here, apparently, is a considerable difference which must be borne by the exporter. That is indeed the case. The difference represents the interest on the money which he receives at once, and which, in any other case, he would be out of until a remittance had been received from the point to which the goods were shipped. Under the circumstances the exporter is quite ready to pay this interest as well as the commission which the banker charges him for issuing the credit. All that can easily enough be allowed for in the price at which the goods are sold.

58. *Where the advance is actually made.*—A third question often asked in connection with export letters of credit is as to who does actually put up the money which the exporter receives at the time the shipment is made. The answer is that the money comes from the great discount market in London, which absorbs the long draft drawn under the credit by the exporter. Directly he has drawn this draft he sells it in the exchange market for dollars. The draft is then sent to London and discounted—that is to say, an amount of money equal to the face value of the draft, less only the amount of the discount, is credited to the account of the New York banker who bought it. It is from the great discount market in London, in other words, that the money actually comes.

CHAPTER V

FOREIGN EXCHANGE AND THE INTERNATIONAL SECURITY MARKET

54. *The three classes of international security dealings.*—Out of Europe's interest in American enterprise and constantly growing investment in American securities arises an immense volume of international security dealings. Estimates, as nearly reliable as can be made, place the amount of foreign-held American securities at six billion dollars. The maintenance alone of such an investment makes necessary dealings which run up into the hundreds of millions each year, affording, as well, an opportunity for speculative and arbitraging operations between the markets, the vast extent of which it is impossible even to estimate.

Security dealings between our own and the foreign markets resolve themselves, broadly speaking, into three classes. First, there is the business arising from replacement of maturing investments and the distribution to foreign buyers of new issues. Second, there are the great operations which accompany speculations of an international nature; cases, for instance, where foreign operators or banking houses, working on joint account with parties here, carry large lines of stocks or bonds. Third, there is a great volume of dealings arising from the never-ceasing efforts to "arbitrage" between various markets—to buy something in one city and at the same moment turn around and sell it in some other city at a higher price.

55. *Replacement of maturing investments.*—Taking the first class of dealings, it readily appears how great a volume of trading originates solely from the replacements of maturing bonds. Of the six billion dollars of "Americans" held abroad a considerable part consists of stocks, but it is safe to say that at least two-thirds of the total is made up of bonds. Furthermore, the great bulk of this foreign money went into our American bonds a number of years ago at the time when the development of the West and the construction of its railways was being so largely carried on with foreign capital. Each year a larger proportion of these bonds is coming due, and where renewals are not made, the way is opened for investment in something else.

American banking houses closely in touch with their foreign correspondents know just about what securities their friends and clients on the other side hold. The most careful watch is kept upon the maturity of these investments, and offerings and suggestions are usually governed by what the house here knows of its correspondents' inclination to buy. A foreign holder, for instance, of Atchison serial debentures which run off in large amount during the next few years, is apt to have great quantities of various Atchison issues offered him during the time that his old Atchison bonds are maturing. He has shown preference for that kind of a bond, dealers here reason, and so that is the kind of a bond he is apt to want in substitution.

Knowledge of what investments are held by big capitalists abroad is, of course, an extremely valuable asset of the bond dealer here and is very hard to obtain. There are many cases where the foreign and domestic firms are so close to each other that the foreign firm simply sends lists of what it holds and what its clients

own, but more often the banker here gets his information from the coupons which are regularly sent him for collection. That is, of course, an infallible indication of what bonds are being held for fixed investment and is a clew which the shrewd dealer here never fails to follow up and use for all it is worth.

The amount of new American securities annually sent abroad is very large. More and more, as the financial relationship of our own and the foreign markets has been strengthened and developed have bankers here come to rely upon the participation of their foreign friends in any syndicates which they go into. It has always been the case that when blocks of first-class bonds were underwritten by powerful international houses here, a good part of the underwriting was for bankers on the other side. Now, however, it has come about that issues brought out even by relatively unimportant financial interests are being continually offered and placed on the other side in localities where American bonds not so long ago would not have had any market whatever.

56. *International speculations.*—Turning to the second class of international trading—speculative operations by foreign interests in our market—it appears that dealings of this kind at times foot up to an enormous total. There are, of course, countless forms in which operations of this kind are conducted, but they are pretty much all based upon the principle which the following example illustrates. An operator or banking house abroad has come to a cable agreement with its American representative that a certain stock can be profitably bought. The amount which is to be carried (joint account, usually) is fixed upon and the American firm goes ahead and buys the stock. But

instead of paying for the stock out of its own capital or borrowing the money from a bank, the American house is apt to raise the money by drawing sixty to ninety-day bills of exchange in pounds, marks, or francs, as the case may be, upon its foreign partner in the transaction. These "long" bills it sells in the exchange market, using the dollar proceeds to pay for the stocks which have been bought.

As the case then stands, the stocks have been bought and are being carried with money on which no interest is being paid. At the same time it must always be remembered that the American house has drawn and the foreign house has "accepted" ninety-day bills of exchange, and that in just three months the holders of the bills will come to the firm on which they are drawn and demand payment. By that time the American firm must have sent money across with which to meet the maturing bills.

But suppose that the parties in the transaction have not had the chance or have not seen fit to sell their stock before the bills of exchange come due in Europe. Where, then, is the American firm going to raise the money to send abroad to its correspondents? By "renewing" as they call it—selling more long bills and using the proceeds to send across to retire the first set of long bills. Suppose that in the first place £10,000 of ninety-day bills had been drawn and fell due November 30. Then, if the stock had not been sold, on November 30 the American house would draw £10,000 more of ninety-day bills and use the dollar proceeds to buy demand exchange to send to its foreign correspondent. The dollar proceeds of £10,000, "nineties," would, of course, not be enough to buy £10,000 of demand exchange the same day. The demand ex-

change would be apt to cost from three to four cents a pound sterling more than could be realized on the new set of "nineties," this difference representing the interest on the money.

As has been remarked, international speculative operations in stocks are of an infinite variety and involve all kinds of complicated foreign exchange transactions. Very often the stocks or bonds are not bought on joint account and instead of being "carried" here, are drawn against, and at once shipped to the other side. Sometimes, even in joint account transactions, it is found better to ship the stocks to a foreign market and borrow on them there. Operations of this sort, however, are more apt to come under the first class mentioned. Where stock is bought for a turn the whole transaction is likely to be along the line of the example which has been given.

57. *International arbitraging.*—Coming now to the third class of international security dealings, it appears that out of the maintaining of the parity of the various stock and bond markets arises a large volume of dealings. With cable facilities developed as they are now, it is evident that it is impossible for stocks in which there is any broad market to be selling very far apart on two different exchanges. Expert arbitrageurs are at hand in every market constantly receiving cable reports from other markets in which they work, and their operations continually tend to bring together prices and keep them on a parity.

Without becoming involved in the intricate details of arbitraging between stock exchanges, it may merely be said that on account of the difference in time the only part of our session in New York during which the London market is open is between 10 and 11 o'clock in

the morning. During that time the same active stocks are being traded in on both exchanges at the same time. And during that hour there are a number of houses with direct connections at each end of the cable who are watching their chance to shave out a difference of anything from an eighth of a point to a point.

58. *Value of early news.*—If the arbitrageurs are so keen, why is there ever any difference in the parity, or a chance for any one to make money? Simply because the same influences affect the two markets differently and news often reaches one market before the other. Foreign political disturbances, for instance, are more likely to start selling movements among foreign speculative holders of American stocks than among speculators here. When a movement like that begins it will be easily seen where the arbitrageur's chance comes in. Stock is being pressed on the foreign market. Realizing that fact, he gets the best bid here and deducting the fraction he is willing to make, cables the bid to the other market. If he has sized up the movement right, the chances are that his bid will buy the stock and that he will be able to make the difference.

Strictly speaking, both ends of an arbitrage transaction are closed at the same time and no risk is taken. In actual practice, however, it continually happens that the chance to do a good stroke of business presents itself conditional to the arbitrageur's being willing to buy or sell in one market and wait a few minutes before closing the other end. This is particularly so in the less active stocks. Frequently it happens that shares of this kind are offered in a foreign market at such a concession from the last price here that the operator can be practically sure that if he takes the stock offered, the next bid here will enable him to get out at a good profit. In

dealings of this kind there is naturally an element of risk and in bad markets considerable losses sometimes have to be taken. Success in that kind of arbitrage presupposes great skill and shrewdness on the part of the operator.

59. *Arbitrage profits.*—Straight arbitrage between two stock exchanges is a more or less exact operation, much more so than the great amount of arbitraging in bonds which is going on all the time. More difficult to put through, these deals are far more profitable than the shaving off of fractions in stocks. And realizing how big the outside market for American bonds in London has become, many prominent houses have men whose sole business it is to keep in touch with the market for international securities in New York and London and to put through trades between the two markets.

In theory the idea is the same as when bonds come into the Philadelphia market and a Philadelphia house offers them by wire in New York, half a point or a point higher. In actual practice, however, the case is very different, for the number of private wires into most of our big cities is such that there is not much chance for profit. But between New York and London there are comparatively few competitors in the field and cabling is too expensive a luxury to be indulged in freely.

Where the New York house has the right London connections this arbitrage business in bonds is exceedingly profitable. Even on fairly active bonds it is not at all unusual to make over a point net, while on bonds in which there is not a continually quoted market there is the opportunity to take much more. The element of risk, too, can be completely eliminated if the operator wishes, for firm bids and offers for cable reply are to

be had in both markets. What is absolutely essential, of course, in business of this kind, is to have a man in charge of it who knows not only the market here but exactly where the right bids and offers are to be found on the other side.

60. *Market influences.*—These are the three great classes of international security trading. Concerning their effect upon exchange rates it is apparent that as the speculative stock operations described are usually of a temporary nature, and as arbitrage transactions in stocks and bonds are evened up the same day, the first class of dealings is the only one which can exert any permanent influence on foreign exchange and the international money market. There are times, in fact, when the foreign exchange market is governed exclusively by international investment sales or purchases of securities. The trade balance, heavy exports of commodities, and such factors, seem to be completely ignored. What seems to be all-important is the fact that a selling movement is under way. Stocks are being sold and exchange to pay for them must be had. So the price of exchange goes up.

Such a rise in exchange is by no means necessarily due to stocks or bonds actually sold. Very frequently it is predicated upon what foreign exchange managers and dealers think of the chances of a continuation of the selling movement. Europe may sell 50,000 shares of investment stock here to-day and exchange will have to be found to pay for it. But what really regulates the price of that exchange is what the dealers think of the probability of the selling movement's going on. If they think that Europe's sales of to-day will be followed by continuing sales to-morrow and next week, they figure that exchange will have to be bought all

along, and they will be loath to draw on their balances. It not infrequently happens that bankers have good round balances abroad drawing but very moderate interest, but that it is impossible to buy drafts from them except at continually advancing rates. They figure exchange as rising, and simply decline to draw.

61. *Strong effect on exchange rates.*—Movements of this kind sometimes go on for weeks and months, are interrupted, and are resumed. It is when stocks and bonds are being bought by us on the foreign markets in quantity that foreign exchange is consistently strong, and when we are selling on a large scale that it is consistently weak. Other influences can be at work, but an actual movement in securities, either way, will always give the exchange market its real trend. And it is for that reason, more and more as the financial relationship between our own and the foreign markets is being developed, that the exchange market is coming to be looked upon as far and away the best tangible indication of what the international movement of securities actually is.

CHAPTER VI

THE MOVEMENT OF GOLD

62. *Production of gold.*—Underlying the whole question of gold movements—the passage from one market to another of great quantities of specie—is the fact that of the gold now annually produced, a good deal more than half originates in countries which have no great need for a circulating medium, and must be distributed to the banking centers of the countries which have and which produce no gold themselves. The production of gold in 1912 was $471,000,000, of which $218,000,000 originated in Africa and about $50,000,000 in Australasia. Practically all of this new gold has, in the first place, to make what might be called a primary movement from the mines to some center from which it can be redistributed. London is that center; has been from time immemorial. Imports of virgin gold into London between the years 1905 and 1908 inclusive amounted to $700,000,000. Of this amount London retained but $67,000,000. The remainder was all distributed to other countries—$205,000,000 to France, $170,000,000 to the United States, and the balance scattered among other countries.

It is important to note the conditions under which this distribution of gold takes place. The gold market in London is held every Monday morning. On that day there is a public auction of the new gold which has arrived during the past week. The brokers representing the various foreign banks and the local banks as

well, come prepared to bid for the new gold according as the exchange on various points allows them. The Bank of England is required by law to buy all the gold offered it at the rate of 77 shillings, 9 pence per ounce (that is to say, gold of the fineness of British sovereigns, .916–2-3). Above this amount the brokers can bid according to the urgency of the demand on the part of the principals whom they represent. Gold very frequently sells very much above 77 shillings, 9 pence—during the panic of 1907, in fact, the rate went up as far as 78 shillings, 2 pence per ounce.

63. *Distribution of gold.*—But after the gold has been taken in London and sent to various foreign centers it does not follow that the distribution is complete. Financial conditions obtaining at those points may make it possible for the time being for representatives of bankers at those points to go into the London market and get gold by bidding for it, but later these conditions may so change as to necessitate a further readjustment. Frankfort, for instance, may be in a position to obtain a good part of the gold arriving during some week in London, but in a very short time it may come about that Paris may be able to draw most of that gold from Frankfort. And so there is a continuous movement set up, after the first radiating of the gold from London, which might well be called a secondary distribution. When exchange is high gold goes out and when exchange is low gold comes in. It may seem almost too elementary to mention this, but for a clear understanding of the various influences which govern gold movements it is indispensable that the idea should be firmly established how the movement takes place along the lines of exchange rates. When exchange on a point is high it indicates primarily a scarcity

of exchange and a great demand. Consequently when the demand comes to exceed the supply some other medium of exchange must be found and gold goes out. Conversely with regard to imports, when exchange on any point is exceedingly low, as for instance when it is possible to buy a pound sterling in New York at $4.84 or $4.83, gold naturally tends to come in. When a pound can be obtained at so low a rate it is possible to go into the foreign markets and pay a premium for gold. It is the simple idea that when a draft on any place, local or foreign, can be cheaply obtained, it is possible to go into that place and pay a high price for anything which you may happen to want to buy.

The difference between gold exports and imports is, after all, merely a matter of view point. We consider that we are shipping gold to London; London considers that she is importing gold from the United States. It is one and the same thing, merely a question as to how you look at it. Understanding the causes which make exchange high and thus causes gold to flow from one country to another is understanding the causes which govern both exports and imports of the metal.

64. *Small merchandise exports.*—As to the influences which tend to raise foreign exchange and thus cause gold to move, there are four main points to consider. The first may be stated as small merchandise exports resulting in a scarcity of exchange. The second has to do with low money here and the remitting of balances to points at which they can be more profitably employed. The third consideration has to do with high money at some foreign point which draws capital there and consequently raises the rate of exchange on that point. The fourth consideration is the international selling of securities.

With regard to the first question—that of exports and imports in their effect upon the gold movement—it may be considered that while the old school of economists overrated the importance of the merchandise trade balance, it is just as wrong to go to the other extreme and fail to recognize the enormously important influence which merchandise shipments do actually exert upon the movement of specie. Small exports mean small supplies of exchange. When exports are small, drawings of exchange against them are small, and, not having large balances on the other side, bankers are forced to charge a high rate of exchange for any bills which customers may want them to draw.

65. *Low money and remitting of balances.*—The second factor making for high exchange is low money. Money and exchange rates always work counter, that is to say, when money rates rise exchange rates decline, and vice versa. The reason is that when money is cheap at any given point, lending institutions send away their loanable funds to some other point, to accomplish which end they have to buy large quantities of exchange, thereby putting up rates. During a long period of cheap money there is almost a continuous demand for exchange by bankers who want to send away their money to points where a better return can be had for its use, and this demand almost invariably results in a continuously high level of exchange rates. Everybody wants to send funds away from a point where money is in such poor demand. Frequently the only way in which it can be sent is in the form of gold.

66. *High money rates.*—With regard to the third influence making for high exchange, when money is high at some foreign point, everybody in the business of lending money wants to remit to that point. Granted

that the financial center in question is one of importance, a place for instance in which it is possible to carry on large loaning operations, it is almost inevitable that exchange rates on that point will rise.

Just here attention ought perhaps to be given to the question of the manipulation of the foreign money markets in order to influence exchange rates upon them at outside points. The bank rate in a foreign market such as London or Paris, is of enormous importance in determining what the level of money there will be. The English bank rate, for instance, is of such importance that a rise in it of not more than one-half of 1 per cent is often enough to make a big difference in exchange on London all over the world. Outside exchange rates are singularly sensitive to the movement of the Bank of England rate, something which is probably accounted for by the fact that London is the financial center of the world, the point through which imports and exports all over the world are financed. London might be called the ganglion of the world's financial nerve system from which the slightest shock is reflected throughout commerce all over the earth. That being the case, the governors of the Bank of England, who have the making of the bank rate in charge, or the governors of the Bank of France, who have the power to influence their own market in like degree, are able to raise or lower most arbitrarily the level of money and thus cause a rise or fall at other cities in the foreign exchanges on London or Paris.

67. *International trading in securities.*—The fourth consideration making for high exchange has reference to the selling of securities by one market in another. When Europe sells stocks, for instance, we buy, and when we buy we have to pay for what we have

bought. It is well worth while to note the relation between exchange rates and the movement of some of the international stocks. A sudden selling movement by London of, say, forty or fifty thousand shares of high-priced stocks is very often enough to give a sharp upturn to exchange rates here. As an underlying and continued influence the trade balance or low money here, or high money there, may have a much more powerful effect, but this question of a sudden demand for exchange to pay for forty or fifty thousand shares of stock is enough to cause astonishingly sharp swings in the exchange market—often enough, in fact, to push the rate just above the gold export point.

68. *Methods of moving gold.*—Turning from the discussion of reasons why gold moves from one country to another to the way in which it moves, shipments may be divided into two broad classes, direct and indirect. In the first case the gold is shipped straight to the point to which it is desired to transfer the balance. In the other case the gold is shipped to some third place for the purpose of buying exchange upon the place to which the balance is actually to be transferred.

Taking up direct shipments first, the operation is about as follows: A banker, finding exchange conditions favorable, decides to ship, say, £40,000 to London. He goes to the assay office, buys the gold and ships it to his foreign correspondent, at the same time drawing bills of exchange against the newly created balance. If one can sell these bills of exchange for more dollars than it cost him to buy the gold, pay the charges on it, and ship it across, he makes the difference.

The following tables show the operation in detail. The first table shows what it costs to get the gold out of the assay office and send it to Europe. The other tables

show what amount of foreign currency would be realized in case the metal were sent to either England, France, or Germany, and the rate at which the American banker shipping the gold would have to sell his reimbursing drafts in order to come out even on the transaction:

COST OF BUYING AND SHIPPING GOLD.

10,000 ounces bar gold, .993 fine, at $20.6718325 per ounce 1,000 fine	$205,271.29
Plus premium, United States assay office, 4–100 per cent	82.08
	$205,353.37
Packing, cartage, etc., 5 kegs at $2.25 per keg	11.25
Freight, 5-32 per cent	320.75
Insurance, 1-20 per cent, less 10 per cent	92.34
	$205,777.71

CREDITED IN GREAT BRITAIN.

10,000 ounces gold, .993 fine, at 77s. 9d. per ounce standard		£42,112–10–0
Less 1–40 per cent commission	£10–10–0	
Petties	1–18–0	12– 8–0
		£42,100– 2–0

To come out even, drafts must be sold at 488.78.

CREDITED IN FRANCE.

10,000 ounces gold .993 fine, 3412.94 francs per kilogram		Fcs. 1,061,542.10
Less 1–40 per cent commission	Fcs. 262.50	
Petties	47.00	309.50
		Fcs. 1,061,232.60

To come out even, drafts must be sold at 515.766.

CREDITED IN GERMANY.

10,000 ounces gold .993 fine at 2784 marks per kilogram		Mks. 859,858.30
Less 1–40 per cent commission	Mks. 215.00	
Petties	37.60	252.60
		Mks. 859,605.70

To come out even, drafts must be sold at 95.754.

69. *Indirect methods of moving gold.*—Indirect shipments are of great variety but are all founded on the idea of sending gold to some point where it can

be used to buy, cheaply, exchange on some other point. Of these transactions, the one best known is the so called "triangular operation" in which the gold is shipped to Paris for the purpose of buying exchange on London. The succession of steps is as follows: The metal is shipped to the French capital; exchange on London is purchased with the proceeds; this exchange is then remitted to London for credit of the American shipper of the gold; the shipper draws his sterling draft on London against the newly created balance.

The full details of an actual shipment are as follows:

48,500 ounces bar gold .995 fine at $20.5684		$997,567
Freight, ⅛ per cent	$1,247	
Insurance, 4½ c. per $100	450	
Assay office charge 4 c. per $100	400	
Interest 6 days at 2 per cent	333	
(From time gold is shipped to Paris until the drafts on London can be sold.)		
Cartage and packing	60	
Com. in Paris	250	2,740
		$1,000,307
Banque de France buys gold .995 fine at fcs. 3419.81 per kilo (= 106.3705 francs per troy ounce)		
48,500 ounces at fcs. 106.3705 = fcs. 5,158,969.		
Fcs. 5,158,969 at 25.10 = £205,536.		
£205,536 at 486.70 =		1,000,342
Profit		$ 35

Conditions under which there is practically no profit or loss.	New York Exchange on London ..	486.70
	Paris Exchange on London	25.10
	Money in New York	2 per cent

70. *Profits on shipments.*—Under ordinary circumstances, if a banker makes between $500 and $1,000 on a million dollar shipment he considers himself very well paid. Considering all the trouble which the earning of this amount involves, the business is not overattractive. The fact is mentioned, not to show that gold exports are not important but rather to show why it is that a great many bankers will not go in for them.

A number of houses in fact never undertake gold shipments under ordinary circumstances.

There is further to be considered the over-draft which results from a shipment of this kind and which at times makes a strain on a firm's credit. It is to be borne in mind that the drafts which are sold on London at the beginning of the operation are immediately sent over there by the buyer. On the other hand the gold which goes to Paris takes some time to arrive there and even after its arrival one or two days must be allowed for assaying and crediting it, so that the "cover" for the drafts which have been drawn on London does not arrive in London until three or four days after the drafts have been presented. Naturally an over-draft of this amount is only possible where the house in London and the house in New York are closely affiliated. When the drafts are drawn the New York house advises by cable that gold has been shipped to Paris for cover. But even at that, unless the London house has explicit faith in its New York correspondent it will hardly be willing to pay out a million dollars even with the certainty of reimbursement within three days.

For this reason the business of shipping gold is coming to be more and more confined to a few bankers who have the facilities, whose managers are adept in figuring out any possible profit, and who are willing, both for the sake of the advertising and of the sometimes very small profit, to go to the trouble which gold shipments necessarily involve.

CHAPTER VII

HOW FOREIGN EXCHANGE IS BOUGHT AND SOLD

71. *New York the principal exchange center.*—Recent years have seen a great growth in the amount of foreign exchange business conducted at such points as Chicago, Philadelphia and Boston, but New York still continues the dominating market for foreign exchange in the United States. It is there that the great majority of bills are bought and sold, transactions at New York alone being a number of times greater than those of the rest of the country put together. As our trade with the outside world has expanded, the foreign exchange business at some of the inland points has greatly developed and many of the larger interior banks now keep deposit accounts in London and other European centers. But it is to the New York market, after all, that they must go if they want to buy or sell bills in any great quantity. The bulk of the country's banking resources are concentrated at New York, and it is there that foreign exchange operations, when they are on a large scale, have to be conducted.

72. *Dealings "over the counter."*—Dealings at New York in drafts drawn on foreign countries are not conducted on the floor of any exchange, but are carried on "over-the-counter"—that is to say, directly between the houses interested. Years ago the market for bills of exchange was on the floor of the New York Stock Exchange, but, with the development of our foreign commerce and the greater amount of foreign exchange busi-

ness which it brought into existence, it was found that a market directly between the houses was a much more satisfactory one. In time it came about that dealing in bills on the floor of the Stock Exchange was given up entirely, the buying and selling being done direct between the houses concerned and through brokers.

The foreign exchange houses in New York City which make up the market can be divided into three classes. In the first place, there are the big international banking firms and the banks and trust companies which do a regular foreign exchange business, buying bills from those who have them to sell, selling bills to those who want to buy, and carrying on the business in all its various forms. In the second place there are the firms which do not carry deposit accounts of any size with bankers abroad, but who, while they at times do a big business, confine themselves to such transactions as their other activities bring into existence. Thirdly, there is the large class of "brokers" who neither carry deposit accounts with bankers abroad nor buy foreign exchange for their own account, but who are in the business simply of "getting in between" buyer and seller, and making a commission by bringing them together.

73. *The first class of foreign exchange houses.*—The first class mentioned is the most important, including as it does all the international banking firms and an increasingly large number of the national banks and the trust companies. For a national bank to have a foreign department was, until only a few years ago, an unusual thing, the business being concentrated almost entirely in the hands of the private bankers. Recent years have, however, seen a great change in this regard. Where it was the exception for the big bank or trust company to do a regular foreign exchange business only a compara-

tively short time ago, it is now the rule. As the business has grown in scope and importance it has come about that the progressive bank has felt itself called upon to supply to its customers those facilities which they have come to demand. Inability to furnish drafts drawn on foreign countries, letters of credit, and other foreign exchange facilities, caused the transfer of many a deposit account to rival banks able to furnish those facilities. When the banks began to see it that way they were quick enough to instal foreign departments capable of rendering satisfactorily any service which depositors might require. In some cases such departments confine their operations to strictly necessary business, but in the great majority of instances the installation of a foreign department has opened up such possibilities of profit that the necessary arrangements have been made for doing the business on a wholesale basis. In the city of New York the past decade has seen two institutions, one a national bank and the other a trust company, come to take a commanding position in the foreign exchange field.

The result of the entrance of so many new houses into the field and the development of so much competition has been greatly to improve the character of the service. It was not so many years ago that the foreign exchange houses cared to handle only business involving considerable amounts. The small man was taken care of, it is true, but was compelled to pay high commissions and rates. In that regard, there has been a very great improvement, the small man's business now being considered desirable not only by the new houses which have come into the field but by the old established houses as well, which, in the competition for business, have found it necessary to handle pretty much every sort of desir-

able business, however small. That has resulted in the quotation of very much lower commissions and closer rates to the man whose business is of moderate amount than was formerly the case. With the entrance of so many more banking houses into the field, also, it has come about that the facilities for doing business have greatly increased. It is possible, for instance, to negotiate drafts drawn on less important points with a greater degree of ease and at a closer rate of exchange than was the case only a few years ago.

74. *The exchange banker's function.*—By the houses in this first class a vast variety of foreign exchange business is carried on, but their main function, after all, is to stand between those who have drafts to buy and those who have drafts to sell. The foreign exchange banker, however, does not act in the capacity of broker. He does not, for instance, take a draft which some cotton exporter offers him and turn it over to some champagne importer, perhaps, who has to make a payment on the other side. What he does is to buy the draft the cotton shipper has to offer, and deposit it to his (the banker's) account in London or some other foreign point. He is then in a position to sell the draft which the champagne man requires, drawing upon the credit he has established abroad for that purpose. The foreign exchange banker is thus continuously remitting bills of exchange which are credited to his account on the other side and then drawing drafts upon that balance. So far as he is concerned, the whole scheme of the business is for him to pay a little less for the drafts he buys than he gets for the drafts he sells, the difference constituting his profit.

Very little of the business of the large foreign exchange house is of this elementary character, but, how-

ever complicated the business may be, the underlying principle is always the same—that is to say, the house is all the time establishing balances at London and other foreign financial centers and then selling them out for more dollars than it cost to put them over there. Whether the bills that are sent over to create these balances are drawn against grain or steel or meat, or whether they are drawn at sight or at thirty days' sight or at sixty days' sight makes not the slightest difference. Underlying every transaction is the fact that these houses engaged in the foreign exchange business keep balances with one or more correspondents at all the principal centers abroad, and that as they sell their own drafts against these balances they are constantly under the need of replenishing them. Beyond a certain minimum the balance cannot be allowed to fall. If the house wants to sell its own drafts, therefore, it has got to keep sending over deposits to make its account good.

75. *Rate paid for bills.*—The rate which banking houses are willing to pay for drafts drawn against shipments of merchandise varies with the nature of the drafts, and also with prevailing exchange market conditions. Obviously, the rates which will be paid for a draft drawn against cotton, and not due for sixty or ninety days after it has been "accepted" by the parties on whom it is drawn, will command a lower rate of exchange than a demand draft payable as soon as it is presented to the party on whom it is drawn. In the latter case the face value of the draft is placed to the credit of the American banker almost as soon as it arrives in London. In the case of a bill drawn at sixty or ninety days' sight, the money will not be placed to his credit for several months, unless the bill be discounted, in which case a lesser number of pounds will be placed

to his credit than he paid for. All of which is, of course, taken into account at the time the banker buys the bill from the merchant in New York. Knowing very well that he will either have to wait several months before the money is put to the credit of his account in London, or that he will have to have the bill discounted and have something taken off its face value, the banker in New York will buy the draft only at a considerably lower rate of exchange than if it were drawn at sight.

On any given day there is thus a regular schedule of rates of exchange which bankers will pay for prime bills, having different lengths of time to run. Market conditions, we will say, have fixed the rate for bills payable at sight at 4.86. What the rate for 60-day bills will be depends entirely on what the discount rate in London happens to be—if discount in London is high, obviously there will be more of a difference between the price of "sixties" and "demand" than if discount is low. The higher discount in London is, the more will have to be taken off the face value of 60 and 90-day bills sent over to be discounted. If the rate for demand bills is 4.86 and the discount rate in London is 3 per cent., then the normal price of 60-day bills will be about 4.83. If the discount rate is 4 per cent., the normal rate for "sixties" would be about 4.82. Bills running for ninety days and for longer periods would, of course, demand a correspondingly lower rate of exchange. But in every case what determines the rate which will be paid for "long" bills is: (1) the current price for prime bills payable at sight, and (2) the discount rate prevailing in the center abroad on which the bills happen to be drawn.

That a high discount rate in London thus works a hardship upon exporters of merchandise here and in

other parts of the world is readily apparent. An American shipper of merchandise, having drafts drawn at sight to offer, may be able to get a very satisfactory rate of exchange for them, but if discount in London happens at the time to be high, the rate which he will be able to obtain for whatever long bills he has to sell will be low. Sometimes it happens that when a demand draft on London can be sold for as much as $4.87, discount at London is so high that the best rate obtainable for a 90-day or four-months' bill is 4.82 or 4.81. The tendency of such a condition of things is, naturally, to restrict exports. A very high rate of discount in London is a tax upon the whole world's international commerce, a very large part of which is financed through the London market.

76. *The credit of the drawer.*—What has been said applies, of course, only to prime bills—that is to say, bills drawn by firms of unquestioned standing, and which are favorably known among dealers in foreign exchange. Where the question is of bills drawn by less well-known houses, there is no fixed rate—the market counts, naturally, but the rate at which each bill is bought and sold is a matter of individual negotiation. Not infrequently the prime bill of a big house exporting cotton or some other staple commodity will be selling, say, at 4.83, while the best rate that some smaller house exporting some "specialty" is able to get for its bill, drawn on the same point, will be 4.81 or 4.82. At any given time the market for the same kind of commercial bill will vary widely according to the standing of the drawer and the character of the merchandise against which the bill is drawn. Bills drawn against staple articles for which there is always a quoted market are naturally more in demand than bills drawn

against some "specialty," upon which, in the event of the non-acceptance or the non-payment of the draft, it may be difficult for the banker to realize. Very often a low price offered by bankers for the bills of some particular house is no reflection upon the credit or standing of the concern, but simply reflects the banker's natural preference for bills drawn against readily salable merchandise.

In the conduct of their business, foreign exchange houses usually maintain an elaborate credit department. The purchase of an obligation which does not mature for sixty or ninety days carries with it, necessarily, a certain amount of risk, and, before foreign exchange bankers are willing to assume this risk, they must, naturally, be fully satisfied both as to the standing of the drawer and the drawee. Also, the amount of bills drawn by any one firm "running" on the banker's books is always kept very close track of. Buyers of these sixty and ninety-day commercial bills run a regular ledger, in which each of the drawers of exchange from whom they buy bills has a separate account. As one of the bills "running" comes due, and is paid, or as another bill drawn by this same firm is purchased by the banker, these changes are made in the account, the exact amount outstanding being thus at any moment ascertainable.

Even among time-bills drawn by bankers there is often considerable variation in price. In the case of demand drafts, or "checks," as they are often called, there is never any difference of any account, but where the paper runs for sixty or ninety days, the bill of many a well-considered banking house is esteemed less than the bill of some other. As a result, it not infrequently happens that in order to sell its long paper a banking house will have to accept a price ten or fifteen points

below the market prevailing for the very best bills. That is the case where too many bills have been drawn. The discount market in London keeps very close track of the amount of paper drawn by any one banking house which is being discounted, and when the foreign discount houses consider that the amount drawn by any one firm is running too large, they either refuse to take the paper entirely or charge specially high rates for handling it. That, of course, results in a lower rate of exchange being paid for the bills on this side, when they are first drawn. One of the best-known banking houses recently found itself in this unfortunate position. For reasons of its own it had drawn sixty-day bills to an extent which it thought was all right, but which the discount market in London chose to consider excessive. The result was that, although the credit of that house was unquestioned, its bills for a period of several months sold ten or fifteen points lower than the bills of houses whose general standing was admittedly less good.

77. *The second class of foreign exchange bankers.*— The second great class of banking houses engaged in the foreign exchange business do not go out of their way to buy bills of exchange in order that they may send them abroad and draw their own drafts against them at a profit, but confine their foreign exchange operations to the handling of such business as their own clients may want transacted, or as their own other business may originate. Many a banking house in New York City maintains a foreign exchange department, not for the purpose of making money in the ordinary ways in which money is made in foreign exchange, but simply in order to keep itself in a position to accommodate its customers and advantageously to handle such

business as may come into existence through the firm's operations in the international security markets.

It is in this class that most of the investment houses come. Having strong foreign connections whom they are all the time seeking to interest in syndicates and sub-syndicates in which they themselves are interested, these investment firms at times are in a position to offer big amounts of foreign exchange and at other times are in the market as buyers of big amounts. All that, however, is merely tributary to their regular business. The foreign exchange transactions they put through are concerned entirely with other business which has been done and which has got to be financed. Were the drawer of a bill of exchange against a shipment of merchandise to offer that bill to one of these houses, he would in most cases be informed that the firm confines itself strictly to the handling of banker's paper.

In this class there must also be included the many trust companies which have, in recent years, added foreign exchange departments in order to take care of the foreign exchange operations brought about in the ordinary conduct of their business. Even at that, the turnover of some of these departments is very large indeed. There is one large trust company in New York City whose foreign exchange department is very small, but where the amount of business done runs up into big figures almost every day. That is because this particular company (and there are many others like it) carries big balances at several important European points. The business of its foreign department consists almost exclusively of shifting these balances so as to employ them advantageously, according to the interest rates prevailing. It thus happens that at times this company and the others which do the same kind of thing are in a posi-

tion (although it can hardly be said that they do a regular foreign exchange business) to offer very big amounts of bills all at once; and, on the other hand, there are times when they are suddenly in the market as buyers of hundreds of thousands of pounds.

78. *The third class—"dealers" and "brokers."*—The third class of firms making up the foreign exchange market are the "dealers" and brokers who do not carry deposit-accounts with foreign bankers at all, but who make a practice merely of buying and selling bills as a stock broker buys and sells stocks. Included in this class there are a number of firms having very considerable capital who buy and "carry" bills for their own account when they think that the market is favorable for such operations, but the greater majority of these houses are small and do business merely on a straight brokerage basis.

The "dealers" in foreign exchange are a comparatively recent development, and have come into existence as a result of the great increase in the volume of commercial bills coming into the New York market. Because of the organization of these firms and the fact that they are constantly in touch with so many large banking houses, they are in a position to quote the best of buying rates for commercial bills. They have thus come to build up for themselves a large clientèle of mercantile houses, whose business is of such a character that they have drafts to dispose of right along. Not a few commercial houses, indeed, find it most advantageous to place all the bills they draw with one of these firms of "dealers," who dispose of the bills for them on a strictly commission basis.

Once established, and having gained the confidence of exporters all over the country who continually have

bills to dispose of, the "dealer" is in a fortunate position. Every day he gets a variety of bills from all over the country for sale to the banking house offering him the best rate. And the fact that the dealer has coming in to him bills of all sorts and descriptions makes him *persona grata* to the banker. In the conduct of foreign exchange business the banker is continually in need of bills of different classes and running different lengths of time. From the supply which the dealer has on hand the banker is able to satisfy his needs. Each morning the dealers make the round of the banking houses, offering them whatever bills they have on hand. Out of these offerings the banker selects what he wants. So far as the drawer of the bill is concerned, therefore, it is a case of the very best market possible being found for what he has to sell. The dealer, it is true, charges him a commission on the bills which he disposes of, but that commission is, as a rule, much more than made up in the better rate of exchange which he is thus able to obtain.

79. *Small brokerage charges.*—Like the dealer, the exchange broker's business is to get in between the buyer and seller. The broker's operations, however, are, as a rule, much more limited than are those of the dealer. Whereas the dealer has a clientèle of commercial firms all over the country and contracts with exporters to handle all the bills which they may draw throughout an entire season, the broker is usually confined to bills drawn by banking houses on their correspondents abroad.

The business of foreign exchange brokers used to yield a good living to those who were successful at it, but of late years the possible profits have fallen to very small proportions indeed. There are still a number of

brokers who spend their entire time getting around among the banking houses and attempting to bring buyer and seller together, but the telephone and the private wire have made grievous inroads upon this business. It has come about nowadays that the average broker is willing to work for a commission of five points —that is to say, one twentieth of one per cent. in the pound sterling, which means that if he turns over ten thousand pounds he makes five dollars out of it. In other kinds of exchange the commission is even less, the ordinary brokerage on francs having been reduced to one sixty-fourth of one per cent., which means a little over three dollars on a sale or purchase of one hundred thousand francs. On such a basis as that, it is plain, it is necessary to do a very large volume of business in order to make any money at all.

How a "close" market in foreign exchange is all the time maintained is thus described by the author in an article in the American Exporter:

> Between the three classes of foreign exchange houses mentioned, a very close market in every kind of bill, running for every period of time, is maintained. It might be thought that, the business being done directly between the houses, transactions in different parts of the market might be made at the same time at a considerable difference in rates. It is true, of course, that there is at times some little difference in the rates at which business is being done, but the activity of the brokers, who circulate constantly, and the very free use of the telephone results in the market being given a great degree of homogeneity. Special information received in one quarter of the market may result in rates momentarily higher or lower than elsewhere, but the equalization process is remarkably rapid.

80. *How exchange rates are fixed.*—Every morning the foreign exchange houses get cables from abroad

telling them exactly at what rate exchange on their own and other important cities is selling and also quoting discounts at the moment and for bills "to arrive." From these quotations the foreign exchange banker figures the rate at which he himself is willing to buy or to sell. Immediately after the opening of business the brokers and dealers begin to come in, ready to take orders either to buy or to sell. As a rule, the foreign exchange manager has his office so placed that he can readily see the brokers who go in and out. By the bids and offers they make him and by the free use of his telephone, he is constantly in touch with what is going on throughout the entire foreign exchange market.

All day long, indeed, the foreign exchange houses are in touch not only with what is going on in New York, but also with important developments throughout the entire world. Over the cable comes the news of some important development on the other side—that the discount rate of the Bank of England, for instance, has been advanced or lowered. At once the importance of this development is appraised and reflected in the price at which the house receiving the news is willing to buy or sell. That, of course, exerts an immediate effect upon the rest of the market. Half a dozen times or more during the day, rates may be influenced upward or downward, according to news received. It is exactly as with the price of a stock listed upon some stock exchange and influenced in its quotation by varying reports as to earnings, prospects, etc.

81. *Demand sterling the basic rate.*—So far as the New York market is concerned, the rate at which demand drafts on London can be bought and sold is the basic quotation. Our financial relationships with London are closer than with the rest of the world, and, in

amount, the foreign exchange business done between New York and London greatly exceeds that done between New York and any other center. No exact figures as to how much greater the business with London is are obtainable, but an estimate that the business is at least twice as great as the business done with all the other points put together would probably not be far wrong. The rates of exchange even on such important points as Paris and Berlin, indeed, fluctuate largely according to the fluctuation in the rate for drafts upon London. As explained in a previous chapter, rates cannot get very far apart without arbitrage operations being instituted, which tend to equalize them.

As to the extent of the daily fluctuations in sterling exchange, they are less than is generally imagined. There are times when exchange rates fluctuate wildly, the range for a single day having at times reached several cents in the pound. As a rule, however, the movement of exchange rates is comparatively slight, a quarter of a cent in the pound sterling being a very fair fluctuation for any single day. For weeks at a time, indeed, sterling exchange will not move as much as half a cent in the pound. That, as has been explained before, all depends upon the strength of the forces operative.

QUIZ QUESTIONS

(The numbers refer to the numbered sections in the text)

PART I: BANKING PRINCIPLES

CHAPTER I

1. What are the essential characteristics of money?
2. Define legal tender. Discuss some of the common uses of the term "money."
3. Name two important systems of money classifications.
4. Under what conditions would gold coin be melted up and made into bracelets?
5. What are the essentials of credit money?
6. What is fiat money? Were greenbacks ever fiat money? Why?
7. Does the United States make a profit on coinage operations?
8. Why does cheap money drive good money out of circulation?
9. What is the chief attribute of money?
10. How does money serve as a standard of value?
11. Is gold a perfect standard of deferred payments?
12. How does the use of money as a store of value arise from its function as a medium of exchange?

13. Why is money never idle?

14. What is the purpose of "The Gold Standard Act"?

15. What is bimetallism? What are the essentials of bimetallism?

16. How did our monetary system come to be on a "limping standard"? What effect did the Sherman Act of 1890 have on the "limping standard"?

17. Under what conditions would the bimetallic standard be effective? Is gold ideal money?

CHAPTER II

18. Define credit. What is a credit instrument?

19. How does credit originate?

20. Discuss the basis of credit.

21. What are the barriers to credit?

22. How does credit affect the *entrepreneur?*

23. How does credit promote production in your business?

24. How does credit economize the use of gold?

25. What are the chief qualities of good credit money?

26. Distinguish between credit of general acceptability and credit of limited acceptability. Name some forms of each.

27. Why are bonds and mortgages not suited for use as media of exchange?

28. What is the function of a bank? Explain bank credit.

CHAPTER III

29. Distinguish between value and price.

30. How is the value of money determined?

31. Why is the mission of money "to be gotten rid of"?

32. How does the demand for money arise?

33. What is the difference between the supply of money and the supply of money utility? How is the supply of commodity money determined?

34. What is the relation of the supply of money to prices?

35. How does credit affect prices?

36. Discuss the equation used in the text to illustrate the volume of exchange.

37. What is the practical application of this equation?

38. What is a price table? What are index numbers?

39. How is a price table weighted?

40. Why did the Falkner index number rise during the Civil War period?

41. Discuss the foreign index numbers.

42. What is the effect of a change in the price level?

CHAPTER IV

43. What was the original meaning of the term "bank"?

44. How does the need for a bank arise?

45. Have banks always operated under government supervision?

46. Wherein does bank credit differ from an individual's credit?

47. Discuss a bank's secondary functions.

48. What is a bank of issue?

49. Distinguish between commercial and financial banks.

50. What is a savings bank?

51. Discuss the functions of a trust company.

52. What is a safe-deposit company?

53. What are the functions of building and loan associations?

54. What is a bond and mortgage company?

55. Is the method of obtaining bank charters at present better than it was?

56. How does the "individual" banker differ from the "private" banker?

CHAPTER V

57. What is the purpose of the bank statement?

58. Distinguish between the two classes of liabilities in a bank statement.

59. Name the items which are likely to appear in a national bank's statement.

60. Do concealed assets strengthen a bank from its stockholders' viewpoint?

61. Explain the transactions which create the items on the resource side of a bank statement.

62. On the liability side.

63. Why is not the liability of the owner of bank stock limited as in other corporations?

64. What is the most significant thing to be noted in a bank statement?

65. Is the bank statement an infallible indication of the bank's condition? Why?

66. What should a bank examination show?

CHAPTER VI

67. What are the uses of post notes?

68. Describe the evolution of the bank note.

69. Why is a cash reserve against notes necessary?

70. Discuss the security behind note issues. What are the advantages and disadvantages of the "safety fund"? Bond secured note issues? Note issues based on commercial paper?

71. Discuss the methods of limiting note issue.

72. How does the system of redemption regulate note issue?

73. What is the difference between the currency principle and the banking principle? Why cannot government credit money be made elastic?

74. How does a bank make a profit on its note issues?

CHAPTER VII

75. Wherein does a loan differ from a discount?

76. What is a time loan? A demand loan? What is the danger in carrying heavy call loans?

77. How does the reserve limit a bank's loans?

78. What are investment loans?

79. What is rediscounting? Why is it sometimes advisable?

80. Why are capital loans less desirable than the two classes just mentioned?

81. Discuss mortgage loans.

82. Why is single-name paper usually considered better than double-name paper?

83. What are the advantages of acceptance? How do acceptances originate?

84. What is a collateral note? How is it secured?

85. Discuss warehouse receipts as collateral for loans.

86. What is the attitude toward loans on open book accounts?

87. Why may 100 per cent be charged on call loans?

CHAPTER VIII

88. Define special deposits. General deposits.

89. How may bank deposits be created?

90. How is the amount of the reserve which a bank must carry against deposits regulated?

91. What is the chief weakness of fixing the reserve by law?

92. Discuss the advantages and disadvantages of guaranteeing deposits.

93. What inducements do the banks offer for deposits?

94. Why are checks more generally used than bank notes in this country?

95. Why are clearing houses necessary in a community where there are many banks?

96. Of what service may a clearing house be during a panic?

97. Explain the Boston system of clearing country checks.

CHAPTER IX

98. Why is the use of local checks in making payments between communities unsatisfactory?

99. Why is New York exchange desirable?

100. What is often called "the business man's money"?

101. How does the necessity for currency shipments arise? What is the cost of shipping currency?

102. How are the sub-treasuries used to avoid currency shipments?

103. Discuss the seasonable movement of currency.

104. Why is it impossible to drain a community of its currency?

105. What is a bill of exchange?

CHAPTER X

106. Does it make any difference to a man who has gold whether capital goods are wasted or conserved? Why?

107. Explain fully how the interest rate is fixed.

108. What is the source of supply of loanable funds? How is it regulated?

109. How does the lending power of the banks vary with the savings of the people?

110. Distinguish between the demand for money and the demand for capital.

111. How does a temporary change in the supply of money affect the interest rate?

112. What is the effect on the interest rate and on industry of a steadily increasing supply of money? Of a decreasing supply?

113. What do the cycles in the rate of interest at New York and London show?

114. Do abundant reserves signify an abundance of money? Why?

115. Explain the term "commodity rate of interest."

CHAPTER XI

116. Discuss the early American banks. What regulations were imposed on them that have since proven sound? Unsound?

117. What were the benefits of the First Bank of the United States?

118. In what points did the Second Bank of United States differ from the First? What was the history of the Second Bank?

119. Explain the Suffolk System.

120. Discuss the weaknesses of the safety fund system.

121. Why did the free banking system fail?

122. Was the State Bank of Indiana successful?

123. What were the principal features of the bank law of Louisiana?

124. Why did the banks in which the states were part owners generally fail?

125. What is the lesson of George Smith's money?

CHAPTER XII

126. Discuss the early history of the Bank of England.

127. How did the use of checks develop?

128. Discuss the currency principle.

129. Why is England's currency supply inelastic?

130. How does the Bank of England protect its reserves? Why does it hold such a commanding position?

131. Who controls the Bank of England?

132. What was the result of the first attempt to establish a central bank of issue in France?

133. Describe the organization and management of the Bank of France.

134. Why did the monopoly of note issue result differently in France than it did in England?

135. How is the control of the Bank of France divided?

136. How does the Bank of France protect its gold reserve?

137. When has specie payment been suspended by the Bank of France?

138. What made the foundation of the Imperial Bank of Germany relatively easy?

139. How is the Reichsbank governed?

140. Compare the German provisions for note issue with the English laws.

141. What is the Giro System?

142. How does the Reichsbank control the money market?

143. What are the most important points in the European banking systems?

CHAPTER XIII

144. How are banking facilities extended in Canada?

145. Are Canadian bank notes legal tender? How many notes can a bank issue? How is this limit extended?

146. What security is back of Canadian bank notes?

147. What are the advantages of branch banking?

148. Why is the grain moving season so short in Canada?

149. How do the banks arrange to distribute currency?

150. How do the banks finance the crop movement?

151. Trace the fluctuations in note circulation in Canada.

152. Discuss the "line of credit" and its influence on the relations between bankers and depositors.

153. How are the Canadian banks supervised?

154. What is the shareholder's audit?

CHAPTER XIV

155. What led to the establishment of the national banking system? What were the objects of the National Banking Act?

156. What was the chief feature of the plan?

157. Discuss the early history of the National Banking Act.

158. How does the Comptroller of the Currency control the national banks?

159. What were the principal provisions of the National Banking Act?

160. Discuss in detail the provisions regarding circulating notes.

161. What were the reserve requirements?

162. Discuss the development of bank deposit currency. What need does it fail to meet?

163. What is the result of the seasonal demands for currency?

164. How did the country banks' custom of depositing part of their reserves in New York banks affect the financial situation?

165. How did the Aldrich-Vreeland Act aim to correct this situation?

166. Upon what did the issue of national bank notes depend?

167. Why did our banking system lack unity?

168. What was the relation between the federal treasury and the banks?

169. How did the Secretary of the Treasury aid the National banks?

170. How is the gold standard maintained?

CHAPTER XV

171. To what may the growth of state banking be ascribed?

172. Discuss the development of the trust company.

173. What is the danger in trust company business as at present conducted?

174. How has state banking legislation developed?

175. How does a state bank usually obtain its charter?

176. What steps have been taken in Kansas to regulate a bank's capital?

177. How are the state banks supervised?

178. Is the mutual bank examination plan effective?

179. Is the real estate loan inherently bad? Why?

180. What are the tests of a banking system?

CHAPTER XVI

181. What were the defects of the national banking system?

182. Discuss the Aldrich plan and the objections to it.

183. What are the principal features of the Federal Reserve Act?

184. How is the federal reserve system organized?

185. How is the capital stock of the reserve banks fixed?

186. What are the powers of the Federal Reserve Board?

187. What are the duties and powers of the reserve banks?

188. How is the issue of federal reserve notes regulated?

189. What are the reserve requirements of the reserve banks?

190. What additional powers have been granted to member banks?

191. How are the national bank notes retired?

192. What are the reserve requirements of member banks?

193. How are the earnings of the reserve banks distributed?

PART II: BANKING PRACTICE

CHAPTER I

1. Why does not the average business man get the full service possible from banks?

2. For what kinds of business are national banks equipped? Does the government guarantee their safety?

3. What are practically the only differences between national and state banks?

4. How account for the fact that trust companies possess banking functions?

5. Describe the business of a savings bank.

6. Explain how to make use of published statements in choosing your bank.

7. In comparing national with state banks from the standpoint of service, what two things should be considered?

8. In the statement given (section 8) what evidence indicates security? Ability to provide service?

9. For what sort of service should one seek out a trust company?

10. What sort of service may the business man secure from savings banks?

11. Illustrate the value of good banking connections.

CHAPTER II

12. Why are banks obliged to grant few favors to strangers?

13. What use may be made of the personal introduction in opening an account?

14. From whom will a letter of introduction prove of distinct advantage?

15. What is the usual procedure when one is without introduction?

16. Because of what unfavorable first impressions may one close the door to later banking service?

17. What procedure is advisable in opening a partnership account?

18. Explain the procedure in opening a corporate account.

19. How must banks safeguard themselves in accepting fiduciary accounts?

20. In what way should executors or trustees open accounts?

21. What data do banks secure for their signature files? Is the finger print method here practicable?

22. What attitude should the depositor take toward the bank's careful scrutiny when opening his account?

CHAPTER III

23. What items are offered a bank as deposits?

24. Explain the use of the two types of deposit slips.

25. How does the receiving teller prove the day's deposits?

26. What is the procedure under the "batch" system of proof?

27. Why must banks insist upon proper indorsement of deposits?

28. Explain the use of the different kinds of indorsements.

CHAPTER IV

29. From what source arises the chief loss in handling gold coin?

30. Through what special means is increased the speed and accuracy of handling coins?

31. What problems of handling currency are met in banks, and how are they solved?

32. Explain the terms: "clearings"; "exchanges"; "No. 74" (for example); "on the rack."

33. Of what assistance in clearing is the adding machine?

34. What is done by the analysis department? The routing department?

35. What are the variations in the practice of indorsing transit items?

36. In what case may a customer be assigned a number, with rubber stamp for indorsing?

37. How is the transit proof made?

38. In what way is the transit routine simplified?

39. What is the procedure should a check be returned unpaid?

40. In what ways will collection procedure be modified by the Federal Reserve Act?

41. How is messenger service employed in collecting?

42. How are coupons collected?

43. What are "home debits," and how does a bank handle them?

44. Explain the difference between cash items and collection items. How may a depositor assure himself if doubtful about any item?

CHAPTER V

45. In what book is the depositor's balance shown?

46. What is the need for frequent proofs? What advantage has the Boston Ledger?

47. Discuss the use of the bookkeeping machine.

48. How is a pass book balanced? How is this balance checked?

49. Does your bank use the pass book or the statement system? Have its balances of your account so far been correct?

50. Upon what balances, if any, does your bank allow interest on deposits? In what cases is the taking out of certificates of deposit a desirable plan?

51. How do banks keep account of such certificates of deposit?

CHAPTER VI

52. What information should the teller possess before he cashes a check presented by a depositor? A depositor's check presented by a stranger? How does he secure this information?

53. Should the check be presented to the bank through the clearing house, what is the procedure?

54. Explain the use of certified checks.

55. How do banks keep account of certified checks?

56. If not used, what disposition should be made of a certified check?

57. Should a certified check be lost, what is to be done?

58. For what reasons is the overdrawing of one's account a poor business policy?

59. How are signatures and other information kept for convenient reference?

60. Explain how good pay roll service may be secured?

61. What is the purpose of the reserve? What percentage is required by the Federal Reserve Act?

CHAPTER VII

62. Why is it usually preferable to pay bills in cash by borrowing of one's banker than to pay them by note?

63. How is the timing of notes easily done?

64. In what cases is interest computed in days? In months?

65. How does a bank use credit tickets?

66. How are notes recorded?

67. What device is employed by which the discount clerk learns when notes are due? Of what importance is such knowledge?

68. What need is met by the liability ledger?

69. How are local notes collected?

70. How the out-of-town notes?

71. Explain the course of procedure in case a note is not paid.

72. In making a note what place of payment may well be specified? Why?

73. What is the attitude toward suretyship taken by bankers?

74. Describe the new method introduced by Mr. Buell.

75. What provisions for re-discounting are found in the Federal Reserve Act?

CHAPTER VIII

76. What classes of collateral may be offered as security? What forms of collateral are popular with New York bankers?

77. What is a time loan?

78. With what understanding is a demand loan usually made?

79. What are call loans? Where are such loans frequently employed?

80. What forms of security do banks prefer for these call loans?

81. How do they safeguard themselves as to title?

82. Upon what depends the amount of margin which the bank will desire?

83. Why is the form of note varied from time to time?

84. Of what standing are quasi-public, or "public utilities," stocks?

85. Why are bond investments indirect rather than direct investments for business men?

86. How may one learn the market value of securities?

87. What are listed securities?

88. Where are unlisted securities sold?

89. Explain the method of securing loans upon goods in storage.

90. How are loans obtained upon accounts receivable?

91. What point does Rae emphasize in his witty quotation?

92. What is the view of bankers regarding chattel security?

CHAPTER IX

93. How does the time element affect the desirability of real estate as collateral?

94. What is the plan of payment followed in building loans?

95. Explain the plan of payment in an instalment mortgage.

96. What is a straight mortgage? At what intervals is the interest paid?

97. For what purpose is the blanket mortgage used?

98. How is a judgment secured? Collected?

99. What is a mechanic's lien?

100. In what cases are conditional sales made?

101. Whose rights to a decedent's property are prior, heirs or creditors? How is payment secured?

102. What is the transfer tax?

103. When are taxes collectible?

104. What is an assessment?

105. What information should accompany a bond or a mortgage when employed as collateral?

106. Mention the disadvantages of the usual system of real estate records?

107. What are the objects of the Torrens system?

108. Describe the method of procedure in securing a real estate loan.

109. Explain the plan of participations.

110. Under what restrictions may member banks loan on real estate under the provisions of the Federal Reserve Act?

111. Discuss the pros and cons of banks accepting real estate loans. Do these arguments apply to trust companies and savings banks?

CHAPTER X

112. How may one set about establishing his bank credit?

113. For what general purposes may a loan be desired?

114. Discuss the use of loans in order to take advantage of price changes.

115. Can the advisability of the repairs and renewal reason for a loan be illustrated by your own experience?

116. Why do banks prefer to loan funds for working or circulating capital rather than for fixed capital?

117. For what classes of loans are bankers approached?

118. Why in general are loans to be readily secured?

119. Under what circumstances is refusing a loan highly advantageous to a bank?

120. Of what value in securing loans is a carefully prepared statement of one's business?

121. Explain how a business man should approach the question of securing a loan.

122. In a country bank, what are the usual duties of the president? The vice-president? The cashier?

123. State briefly the organization plan of a city bank.

124. In a trust company, how are the duties divided between secretary and treasurer?

125. For what, and to whom, is the chief clerk responsible?

126. What are the duties of the auditor?

CHAPTER XI

127. Account for the origin of the credit department.

128. What general proportions between the various items should credit analysis reveal?

129. Compare the statements, Figure 12 with Figure 13, point by point.

130. From your observation of some particular firm, justify the general conclusions as to credit risk shown by these two statements.

131. What information may be secured from the would-be borrower's bank record?

132. From whom are special reports secured?

133. In what way are the borrower's trade relations investigated?

134. How is the acceptance or rejection of application finally decided upon?

135. Of what value is good credit standing?

136. What is kiting? Why does it injure the kiter's reputation at the bank?

137. How is it that overdue paper is so well remembered at the bank?

138. In what color of ink are overdrafts noted?

139. Why does the collection of funds require some little time? In the meantime, what are the bank's rules regarding payments on checks?

140. Summarize, in conclusion, what you regard as the most practical means of establishing bank credit.

CHAPTER XII

141. In respect to balances have banks more strict rules now than formerly?

142. For what purpose do bankers accept depositors' accounts. What is the loanable balance?

143. How does the degree of fluctuation of its balance affect the value of an account?

144. How do banks analyze an account in determining its value to them?

145. Name several ways in which a banker is able to serve depositors?

146. Of what service are the safe deposit boxes of banks?

147. What is a clearing house? What service does it perform?

148. Describe the day's work of a clearing house.

149. How do banks protect themselves against losses by defalcation of employés?

150. Is the risk to the depositor from defalcation a serious one?

151. Illustrate the difficulty of detecting forgeries. What two safeguards should the depositor employ?

152. Discuss the work of the American Bankers Association.

153. How was it that bankers took up the issuing of travelers' checks? In what denominations are these checks issued, and at what charge?

154. Why are depositors often inclined to be wasteful of bank supplies?

155. How may depositors show their appreciation of the banks' service, to the end that this service may increase?

PART III: FOREIGN EXCHANGE

CHAPTER I

1. How is the fixed par of exchange determined?

2. Why is it important?

3. A Liverpool, England, spinner has purchased 100 bales of cotton in the United States. How is payment effected?

4. Distinguish between "discountable" and "rebatable" commercial long bills.

5. Why, in a general way, is a commercial bill drawn against cotton safer than one drawn against meat?

6. Why are "clean" bills a risky kind of exchange?

7. Explain how a London banker will pay for bonds which he has purchased from a New York banker.

8. What are the three main classes of "bankers' long bills"?

9. How do international loans create exchange?

10. How do these bills differ from "finance bills"?

11. What limits the issue of "finance bills"?

CHAPTER II

12. Explain the operation of a banker's selling demand exchange against a remittance of demand exchange.

13. Does the credit of the drawer of a commercial bill have much of an effect on the rate of exchange at which it can be sold?

14. Why must bankers who make a practice of selling "cables" keep good balances abroad?

15. What fixes the difference in the rate of exchange between "cables" and "demand"?

16-17. Explain the operation of a banker's selling demand bills against remittances of long bills. When long bills are remitted, when does the balance abroad become available?

18. Why are different bills of the same kind discounted abroad at varying rates?

19-20. Explain how foreign money is loaned in the American market.

21. How is it that foreign money can be loaned out here without any actual cash being sent over?

22. What is meant by the "risk of exchange" on foreign loans?

23. Show why profits made out of this kind of business are large.

24. What is meant by investing money in exchange?

25. Show the principal benefit of investing money in exchange.

26. In the above operation, long bills remitted abroad are not discounted. Why not?

27. What is the reason for "arbitraging" in exchange?

28. Without giving exact figures, explain an arbitrage operation in foreign exchange.

29. Why is great skill required for operations of this kind?

CHAPTER III

30. Why is commercial credit business growing in volume?

31. What is the primary purpose of a commercial credit?

32. How does the shipper of the merchandise get his money?

33. What part does the credit of the importer play?

34. Explain the general purpose of a "trust receipt."

35. What is the great advantage of a commercial credit to an importer to merchandise?

36. What is its advantage to the shipper of the goods?

37. In a commercial credit transaction the banker puts up no actual money, and yet the shipper of the merchandise receives his money at once. Where does it come from?

38. What are export credits?

39. What influence does the issue of commercial credits exert on the stability of the commercial structure?

CHAPTER IV

40. Why is it desirable for an exporter of merchandise to know something about foreign exchange?

41. How may an exporter of goods to Germany get his payment in dollars, instead of in marks?

42. How long does it take for the exporter to get his money?

43. How are banking commissions on foreign exchange transactions determined?

44. What is the advantage of drawing a draft direct on the foreign purchaser of goods?

45. What are the three ways of negotiating these drafts?

46. Through what banking channels do the negotiated drafts move?

47. Why is it becoming more common practice to draw drafts?

48. What are "export letters of credit"?

49. What are the advantages of this method of payment?

50. Show by an example how this method works.

51. Why are payments for trade between this country and South America handled through London?

52. Why do ninety-day bills sell at a lower rate than sight bills of exchange?

53. Where is the market for long-period bills of exchange?

CHAPTER V

54. What are the main divisions of dealings in exchange originating from international security trading?

55. Explain how the replacing of maturing investments held abroad gives rise to foreign exchange transactions.

56. Show the usual method of financing international speculation in securities.

57. Define "arbitrage" as applied to securities.

58. Why is there ever any difference in the price of the same security in two different markets?

59. What constitutes a fair profit in stock arbitrage? In bond arbitrage?

60. Why do operations of this sort at times so strongly influence the exchange market?

61. Why is the exchange market so good an indicator of the trend of international security dealings?

CHAPTER VI

62: Why is there a "primary" movement of gold?

63. What is the secondary distribution?

64. Why do small exports result in high exchange rates?

65. Point out the influence of low money rates on foreign exchange?

66. How do high money rates affect the exchange market?

67. Show how international buying and selling movements of securities affect the exchange market.

68. What is a "direct" movement of gold?

69. An indirect movement?

70. Why is the business of shipping gold concentrated in the hands of a few bankers?

CHAPTER VII

71. What is the principal foreign exchange center in the United States?

72. Where are foreign exchange drafts bought and sold?

73. Name one important class of foreign exchange houses.

74. What is the main principle that underlies the work of houses of this class?

75. What factors determine the rates paid for different kinds of bills of exchange?

76. What effect does the credit of the drawer have on the prices of the bills of exchange which he draws?

77. Describe briefly the second class of foreign exchange bankers.

78. Describe briefly the work of "dealers" and "brokers" in foreign exchange.

79. What factors determine brokerage charges? What would be a reasonable brokerage commission?

80. Describe briefly how the daily rates of exchange are fixed.

81. What is the basic rate, to which all other rates are adjusted, and why?

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